



Service Manual



Service Manual

CU575

Model : CU575



Table Of Contents

| | | | |
|--|-----------|---|------------|
| 1. INTRODUCTION | 5 | 4.9 USB Troubleshooting | 87 |
| 1.1 Purpose | 5 | 4.10 SIM Detect Troubleshooting | 89 |
| 1.2 Regulatory Information | 5 | 4.11 Camera Troubleshooting | 91 |
| 2. PERFORMANCE | 7 | 4.12 Keypad Backlight Troubleshooting | 92 |
| 2.1 System Specification | 7 | 4.13 Folder ON/OFF Troubleshooting | 93 |
| 2.2 Using Condition (Accessory) | 7 | 4.14 Main LCD Troubleshooting | 94 |
| 2.3 Radio Performance | 8 | 4.15 Receiver Path | 95 |
| 2.4 Current Consumption | 11 | 4.16 Headset path | 97 |
| 2.5 Operation Time | 11 | 4.17 Speaker phone path | 99 |
| 2.6 RSSI Bar | 11 | 4.18 Main microphone | 101 |
| 2.7 Battery Bar | 12 | 4.19 Headset microphone | 103 |
| 2.8 BACKUP BATTERY : Over 50 hours | 12 | 5. DOWNLOAD | 105 |
| 2.9 Sound Level | 12 | 5.1 Introduction | 105 |
| 3. RF TECHNICAL BRIEF | 13 | 5.2 Downloading Procedure | 105 |
| 3.1 MSM6260 (Block Diagram) | 13 | 5.3 Troubleshooting Download Errors | 119 |
| 3.2 RF Block Diagram | 14 | 5.4 Caution | 126 |
| 3.3 Memory | 15 | 6. BLOCK DIAGRAM | 127 |
| 3.4 Camera & LCD Interface | 16 | 6.1 CU575 Block Diagram | 127 |
| 3.5 Interface USB,UART,SIM,JTAG | 17 | 7. Circuit Diagram | 129 |
| 3.6 Peripheral | 18 | 8. BGA | 139 |
| 3.7 Audio Block Diagram | 19 | 9. PCB LAYOUT | 143 |
| 3.8 Digital Baseband(DBB/MSM6260) | 20 | 10. Calibration & RF Auto Test | |
| 3.9 Subsystem(MSM6260) | 23 | Program | 147 |
| 3.10 Power Block | 30 | 9.1 Configuration of HOT KIMCHI | 147 |
| 3.11 External memory interface | 35 | 9.2 How to use HOT KIMCHI | 151 |
| 3.12 H/W Sub System | 36 | 9.3 Example for using HOT KIMCHI | 152 |
| 3.13 Main Features | 53 | 11. EXPLODED VIEW & | |
| 4. TROUBLE SHOOTING | 57 | REPLACEMENT PART LIST | 155 |
| 4.1 RF Component | 57 | 11.1 EXPLODED VIEW | 155 |
| 4.2 Checking VCXO Block | 61 | 11.2 Replacement Parts | |
| 4.3 Checking Ant. SW Module Block | 63 | <Mechanic component> | 157 |
| 4.4 Checking UMTS Block | 66 | <Main component> | 160 |
| 4.5 Checking GSM Block | 73 | 11.3 Accessory | 178 |
| 4.6 Power ON Troubleshooting | 79 | | |
| 4.7 Charger Troubleshooting | | | |
| (TA Charging) | 81 | | |
| 4.8 Charger Troubleshooting | | | |
| (USB Charging) | 84 | | |



1. INTRODUCTION

1.1 Purpose

This manual provides the information necessary to repair, calibration, description and download the features of this model.

1.2 Regulatory Information

A. Security

Toll fraud, the unauthorized use of telecommunications system by an unauthorized part (for example, persons other than your company's employees, agents, subcontractors, or person working on your company's behalf) can result in substantial additional charges for your telecommunications services. System users are responsible for the security of own system. There are may be risks of toll fraud associated with your telecommunications system. System users are responsible for programming and configuring the equipment to prevent unauthorized use. The manufacturer does not warrant that this product is immune from the above case but will prevent unauthorized use of commoncarrier telecommunication service of facilities accessed through or connected to it. The manufacturer will not be responsible for any charges that result from such unauthorized use.

B. Incidence of Harm

If a telephone company determines that the equipment provided to customer is faulty and possibly causing harm or interruption in service to the telephone network, it should disconnect telephone service until repair can be done. A telephone company may temporarily disconnect service as long as repair is not done.

C. Changes in Service

A local telephone company may make changes in its communications facilities or procedure. If these changes could reasonably be expected to affect the use of the phones or compatibility with the network, the telephone company is required to give advanced written notice to the user, allowing the user to take appropriate steps to maintain telephone service.

D. Maintenance Limitations

Maintenance limitations on the phones must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs except as specifically noted in this manual. Therefore, note that unauthorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

1. INTRODUCTION

E. Notice of Radiated Emissions

This model complies with rules regarding radiation and radio frequency emission as defined by local regulatory agencies. In accordance with these agencies, you may be required to provide information such as the following to the end user.

F. Pictures

The pictures in this manual are for illustrative purposes only; your actual hardware may look slightly different.

G. Interference and Attenuation

A phone may interfere with sensitive laboratory equipment, medical equipment, etc. Interference from unsuppressed engines or electric motors may cause problems.

H. Electrostatic Sensitive Devices

ATTENTION

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated by the  sign. Following information is ESD handling:

- Service personnel should ground themselves by using a wrist strap when exchange system boards.
- When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in these protective packages until these are used.
- When returning system boards or parts like EEPROM to the factory, use the protective package as described.

2. PERFORMANCE

2.1 System Specification

| Item | Type / Spec. |
|-------------------|---|
| 1. Type | Dual_LCD_Color Folder |
| 2. Size | 98.9 x 51 x 16.9 mm |
| 3. Weight | 102.5g, (with 970mA Battery) |
| 4. Battery | 970 mAh (Li-Polymer) |
| 5. LCD Type | TFT Main LCD(2.2', 176 x 220), TFT Sub LCD(1.3' 128 X160) |
| 6. Accessory | |
| 1)Travel Adaptor | 1) Input : AC 100~240V , Output : 5.1V,700mA |
| 2)Ear-Mic Adaptor | 2) ELA (option) |
| 3)Data Cable | 3) USB data cable (option) |

2.2 Using Condition (Accessory)

1) Maximum Using Condition (Using Environment)

| Item | Specification |
|--------------------------|---------------|
| Available AC Input Power | AC : 240V Max |
| Available DC Input Power | 12 V Max |
| Storage Temperature | -20 ~ +70 °C |

2. PERFORMANCE

2) General Using Condition

| Item | Spec. | Min | Typ. | Max | Unit |
|-----------------------|---------------|-----|------|-----|------|
| Output Power | DC Power | | | 12 | Vdc |
| | Battery Power | 3.2 | 3.7 | 4.2 | Vdc |
| Input Power | AC Power | 100 | 110 | 240 | Vac |
| Current Consumption | | | | | W |
| Operation Temperature | | -20 | | 60 | °C |

2.3 Radio Performance

1) Transmitter-GSM Mode

| Item | Specification |
|---|--|
| Phase Error | Rms : 5° Peak : 20° |
| Frequency Error | GSM850/EGSM : 0.1 ppm DCS/PCS : 0.1 ppm |
| EMC(Radiated Spurious Emission Disturbance) | GSM850/EGSM/DCS/PCS : < -28dBm |
| Transmitter Output power and Burst Timing | GSM850/EGSM : 5dBm - 33dBm ± 3dB DCS/PCS : 0dBm - 30dBm ± 3dB |
| Burst Timing | <3.69us |
| Spectrum due to modulation out to less than 1800kHz offset | 200kHz : -36dBm 600kHz : -51dBm/-56dBm |
| Spectrum due to modulation out to larger than 1800kHz offset to the edge of the transmit band | GSM850/EGSM : 1800-3000kHz : < -63dBc(-46dBm) 3000kHz-6000kHz : < -65dBc(-46dBm) 6000kHz < : < -71dBc(-46dBm) DCS/PCS : 1800-3000kHz : < -65dBc(-51dBm) 6000kHz < : < -73dBc(-51dBm) |
| Spectrum due to switching transient | 400kHz : -19dBm/-22dBm(5/0), -23dBm 600kHz : -21dBm/-24dBm(5/0), -26dBm |
| Reference Sensitivity - TCH/FS | Class II(RBER) : -105dBm(2.439%) |
| Usable receiver input level range | 0.012(-15 - -40dBm) |
| Intermodulation rejection - Speech channels | ± 800kHz, ± 1600kHz : -98dBm/-96dBm (2.439%) |
| AM Suppression -GSM : -31dBm - DCS : -29dBm | -98dBm/-96dBm (2.439%) |
| Timing Advance | ± 0.5T |

2. PERFORMANCE

- Frequency Range : GSM850(824~849MHz/869~894MHz), EGSM(880~915MHz/925~960MHz)
DCS(1710~1785MHz/1805~1880MHz), PCS (1850~1910MHz/1930~1990MHz)
- Oscillator Frequency Range : 1688 ~ 1736 MHz
- Intermediate Frequency : None
- Normal Maximum Output Power : 1995.3 mW(33dBm)

2)Transmitter - WCDMA Mode

| Item | Specification |
|--|--|
| Transmit Frequency | WCDMA850 : 824 MHz ~ 849 MHz WCDMA1900 : 1850 ~1910 MHz |
| Maximum Output Power | +24 dBm / 3.84 MHz, +1 / -3 dB |
| Frequency Error | within ± 0.1 PPM |
| Open Loop Power Control | Normal Conditions : within ± 9 dB, Extreme Conditions : within ± 12 dB |
| Minimum Transmit Power | < -50 dBm /3.84 MHz |
| Occupied Bandwidth | < 5 MHz at 3.84 Mcps (99% of power) |
| Adjacent Channel Leakage Power Ratio (ACLR) | > 33 dB @ ± 5 MHz, > 43 dB @ ± 10 MHz |
| Spurious Emissions If-f _c > 12.5 MHz | < -36 dBm / 1 kHz RW @ 9 kHz \leq f < 150 kHz < -36 dBm / 10 kHz RW @ 150 KHz \leq f < 30 MHz < -36 dBm / 100 kHz RW @ 30 MHz \leq f < 1 GHz < -30 dBm / 1 MHz RW @ 1 GHz \leq f < 12.75 GHz < -41 dBm / 300 kHz RW @ 1893.5 MHz < f < 1919.6 MHz < -67 dBm / 100 kHz RW @ 925 MHz \leq f \leq 935 MHz < -79 dBm / 100 kHz RW @ 935 MHz < f \leq 960 GHz < -71 dBm / 100 kHz RW @ 1805 MHz \leq f \leq 1880 MHz |
| Transmit Intermodulation | < -31 dBc @ 5 MHz & < -41 dBc @ 10 MHz when Interference CW Signal Level = -40 dBc |
| Error Vector Magnitude | < 17.5 %, when Pout \geq -20 dBm |
| Peak Code Domain Error | < -15 dB at Pout \geq -20 dBm |

2. PERFORMANCE

3)Receiver - WCDMA Mode

| Item | Specification |
|------------------------------------|--|
| Receive Frequency | WCDMA850 : 849 MHz ~ 894 MHz WCDMA1900 : 1930 ~1990 MHz |
| Reference Sensitivity Level | BER < 0.001 when $\hat{I}_{or} = -106.7$ dBm / 3.84 MHz |
| Maximum Input Level | BER < 0.001 when $\hat{I}_{or} = -25$ dBm / 3.84 MHz |
| Adjacent Channel Selectivity (ACS) | ACS > 33 dB where BER < 0.001 when $\hat{I}_{or} = -92.7$ dBm / 3.84 MHz & $I_{oac} = -52$ dBm / 3.84 MHz @ ± 5 MHz |
| Blocking Characteristic | BER < 0.001 when $\hat{I}_{or} = -103.7$ dBm / 3.84 MHz & $I_{blocking} = -56$ dBm / 3.84 MHz @ $F_{uw}(\text{offset}) = \pm 10$ MHz or $I_{blocking} = -44$ dBm / 3.84 MHz @ $F_{uw}(\text{offset}) = \pm 15$ MHz |
| Spurious Response | BER < 0.001 when $\hat{I}_{or} = -103.7$ dBm / 3.84 MHz & $I_{blocking} = -44$ dBm |
| Intermodulation | BER < 0.001 when $\hat{I}_{or} = -103.7$ dBm / 3.84 MHz & $I_{ouw1} = -46$ dBm @ $F_{uw1}(\text{offset}) = 10$ MHz & $I_{ouw2} = -46$ dBm / 3.84 MHz @ $F_{uw2}(\text{offset}) = \pm 20$ MHz |
| Spurious Emissions | < -57 dBm / 100 kHz BW @ $9 \text{ kHz} \leq f < 1 \text{ GHz}$ < -47 dBm / 1 MHz BW @ $1 \text{ GHz} \leq f \leq 12.75 \text{ GHz}$ |

2. PERFORMANCE

2.4 Current Consumption

| | WCDMA Only | GSM Only |
|--|--|------------------------|
| Sleep Mode | 1.5mA(sleep current) ↓ | 1.5mA(sleep current) ↓ |
| Standby | 3.8mA(DRX=1.28sec) ↓ | 3.8mA(PM=6) ↓ |
| Talk Mode | VC 13dBm (low power mode) : 323 mA↓ | 323 mA (Tx Lvl:5) |
| NO SVC Mode | TBD | TBD |
| Power Off (Backup Battery Charging) | 300μA ↓ 500μA ↓ | 300μA ↓ 500μA ↓ |

2.5 Operation Time

| | Stand by | Voice Call | VT |
|---------------|--|--|----|
| WCDMA Only | 250 hours ↑ = 3.8mA ↓ (970mAh battery, DRX cycle = 1.28) | 180 mins ↑ = 323mA ↓ (970mAh battery, TX = 12dBm) | / |
| GSM Only | 250 hours ↑ = 3.8mA ↓ (970mAh battery, Paging frame class6) | 180 mins ↑ = 323mA ↓ (970mAh battery, TX = Level 5) | / |

2.6 RSSI Bar

| Level Change | WCDMA | GSM |
|--------------|-------------|--------------|
| 1) BAR 5 | -82 ± 2 dBm | -85 ± 2 dBm |
| 2) BAR 5 → 4 | -82 ± 2 dBm | -85 ± 2 dBm |
| 3) BAR 4 → 3 | -87 ± 2 dBm | -90 ± 2 dBm |
| 4) BAR 3 → 2 | -92 ± 2 dBm | -95 ± 2 dBm |
| 5) BAR 2 → 1 | -95 ± 2 dBm | -100 ± 2 dBm |
| 6) BAR 1 → 0 | -98 ± 2 dBm | -105 ± 2 dBm |

2. PERFORMANCE

2.7 Battery Bar

| Indication | Standby |
|---|---|
| Bar3 | $3.75 \pm 0.05V$ |
| Bar 3 → 2 | $3.75 \pm 0.05V$ |
| Bar 2 → 1 | $3.66 \pm 0.05V$ |
| Bar 1 → Empty | $3.58 \pm 0.05V$ |
| Low Voltage, Warning message+ Blinking | $3.51 \pm 0.05V$ (Stand-by) / $3.58 \pm 0.05V$ (Talk) [Interval : 3min(Stand-by) / 1min(Talk)] |
| Power Off | $3.28 \pm 0.05V$ |

2.8 BACKUP BATTERY : Over 50 hours (When Normal POWER OFF/EMERGENCY OFF)

2.9 Sound Level

Key Tone

1) Standby :

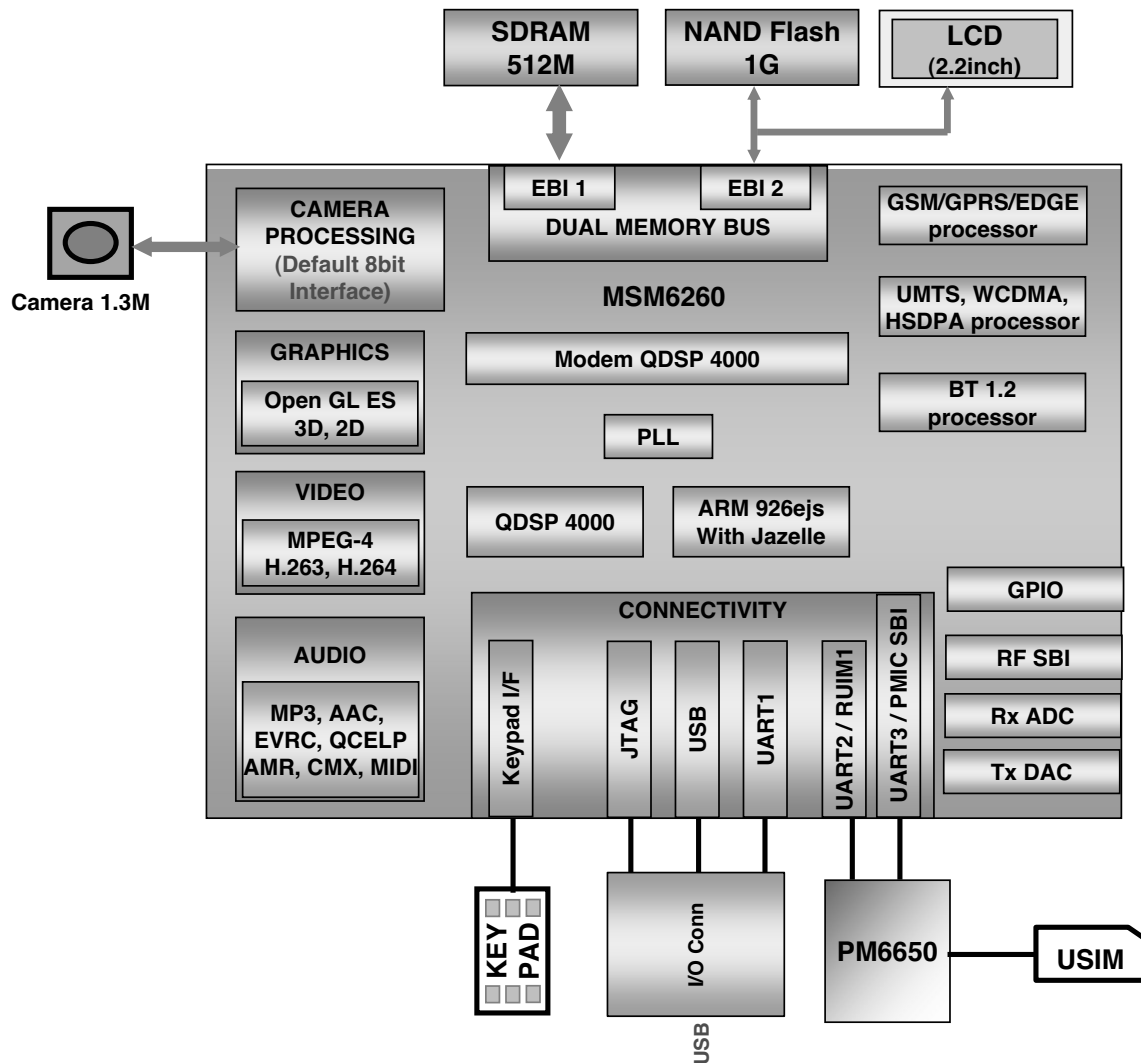
- a) Speaker : 70~120dBspl (When 30cm distance, Maximum Tone)
- b) Headset : 70~100dBspl
- c) Warning Tone : 70~120dBspl (When 30cm distance, Maximum Tone)

2) Talk :

- a) Speaker : 70 ~ 100dBspl
- b) Headset : 70 ~ 100dBspl (Key Tone (In Calling) 100dBspl under)
- c) Warning Tone : 70~100dBspl (When 30cm distance, Maximum Tone)

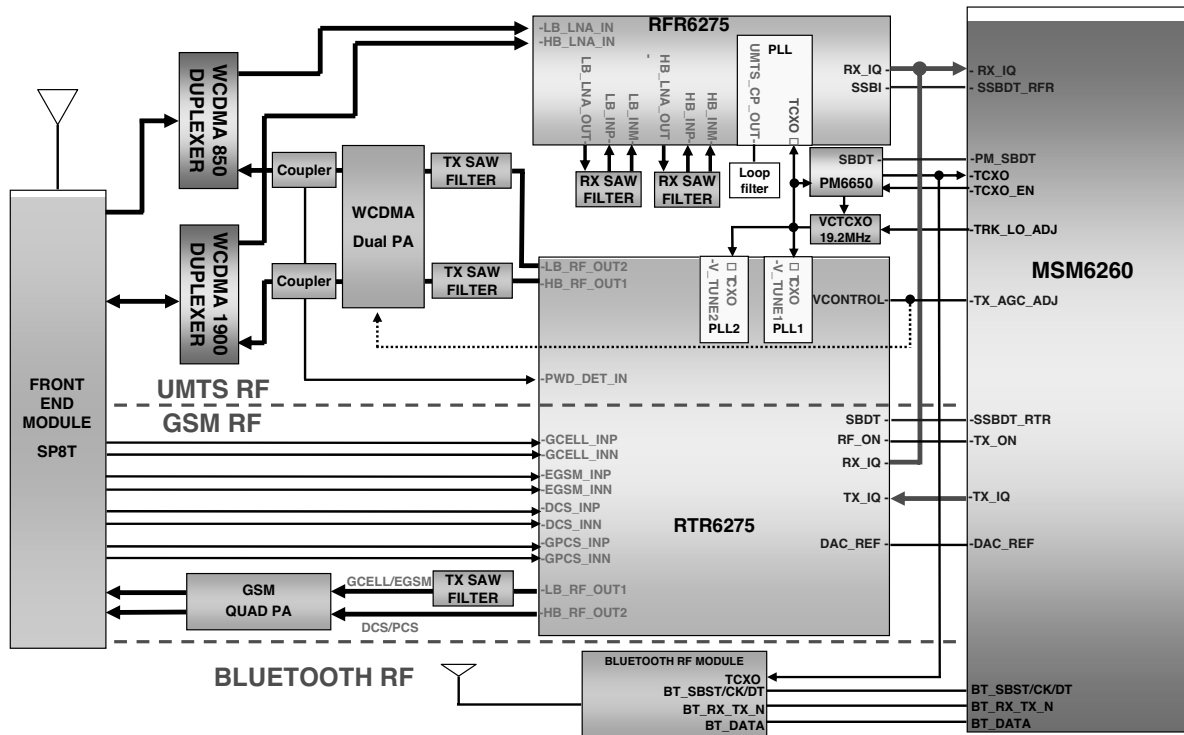
3. TECHNICAL BRIEF

3.1 MSM6260 (Block Diagram)

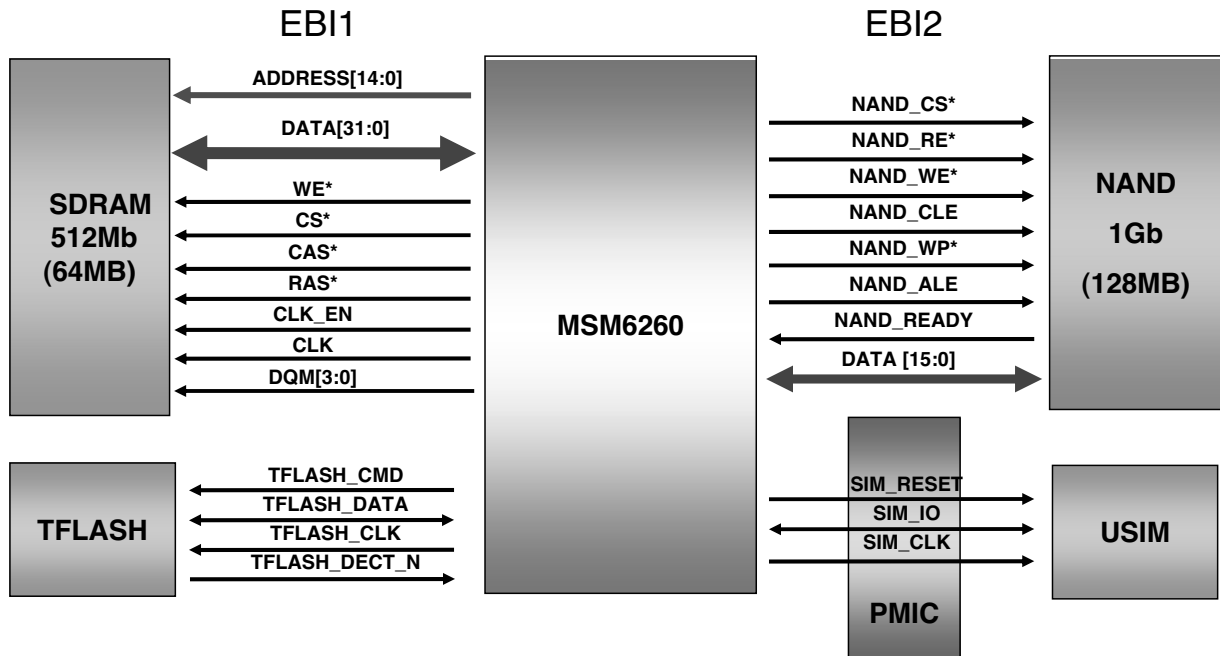


3. TECHNICAL BRIEF

3.2 RF Block Diagram

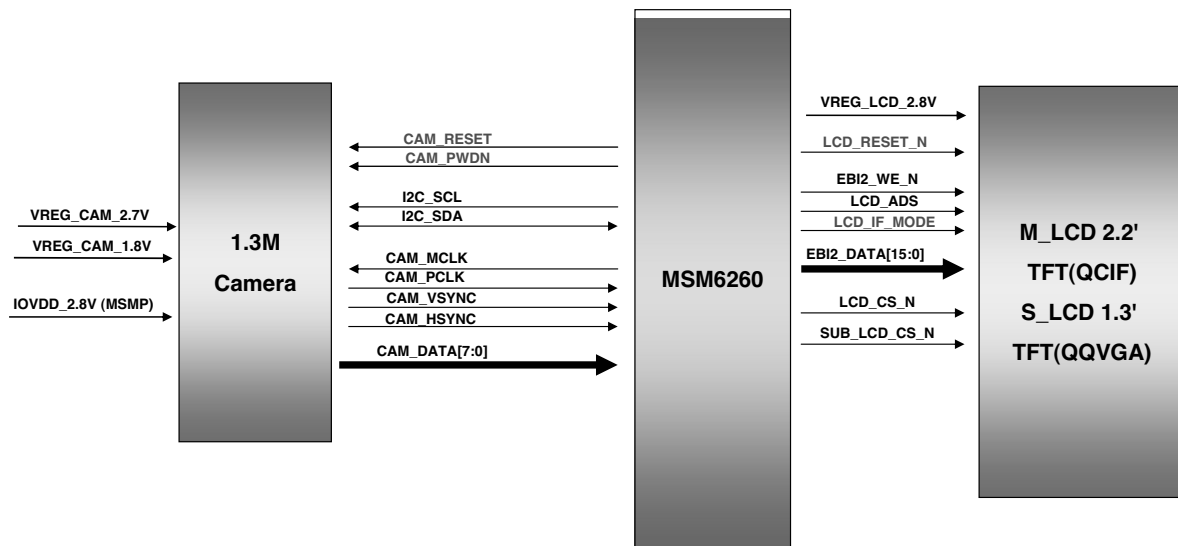


3.3 Memory

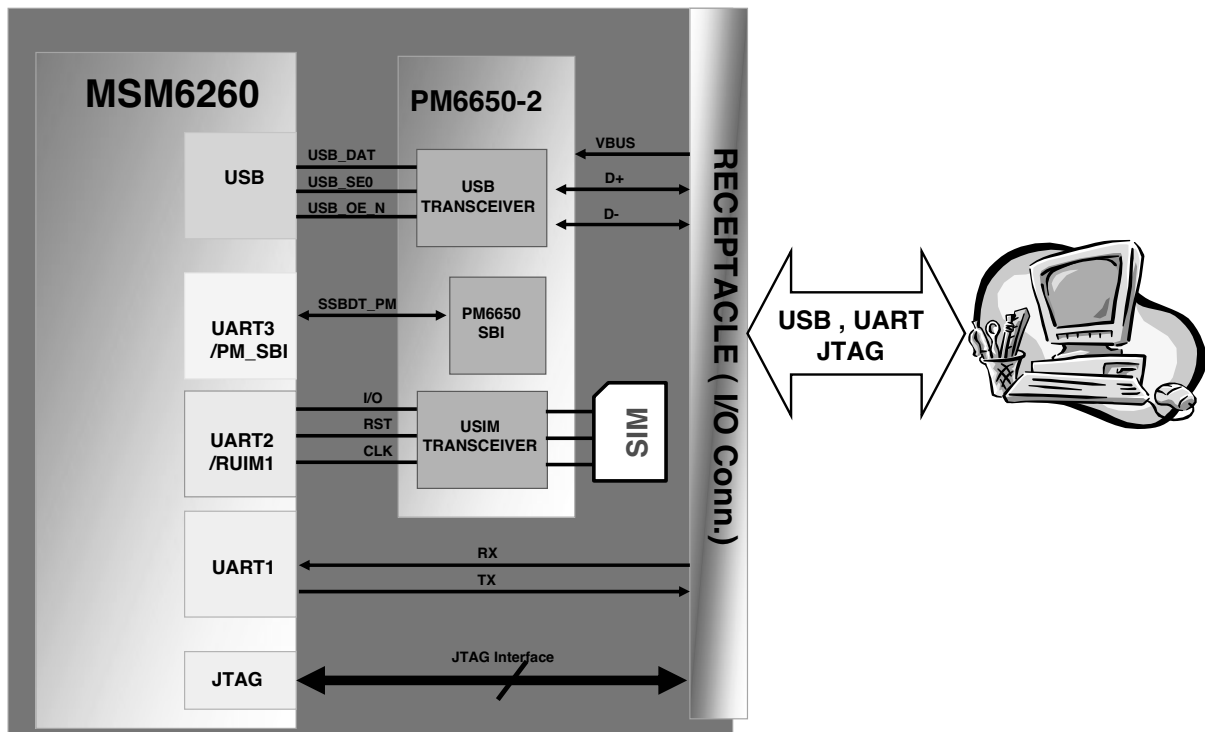


3. TECHNICAL BRIEF

3.4 Camera & LCD Interface

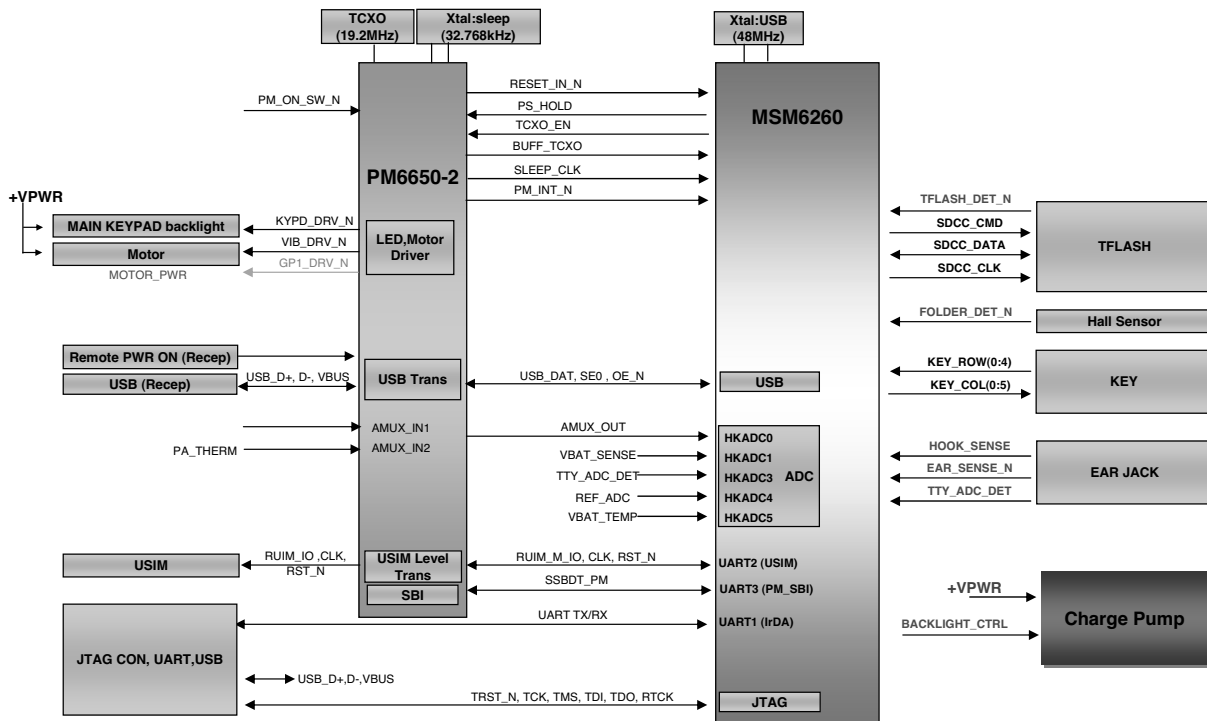


3.5 Interface USB,UART,SIM,JTAG

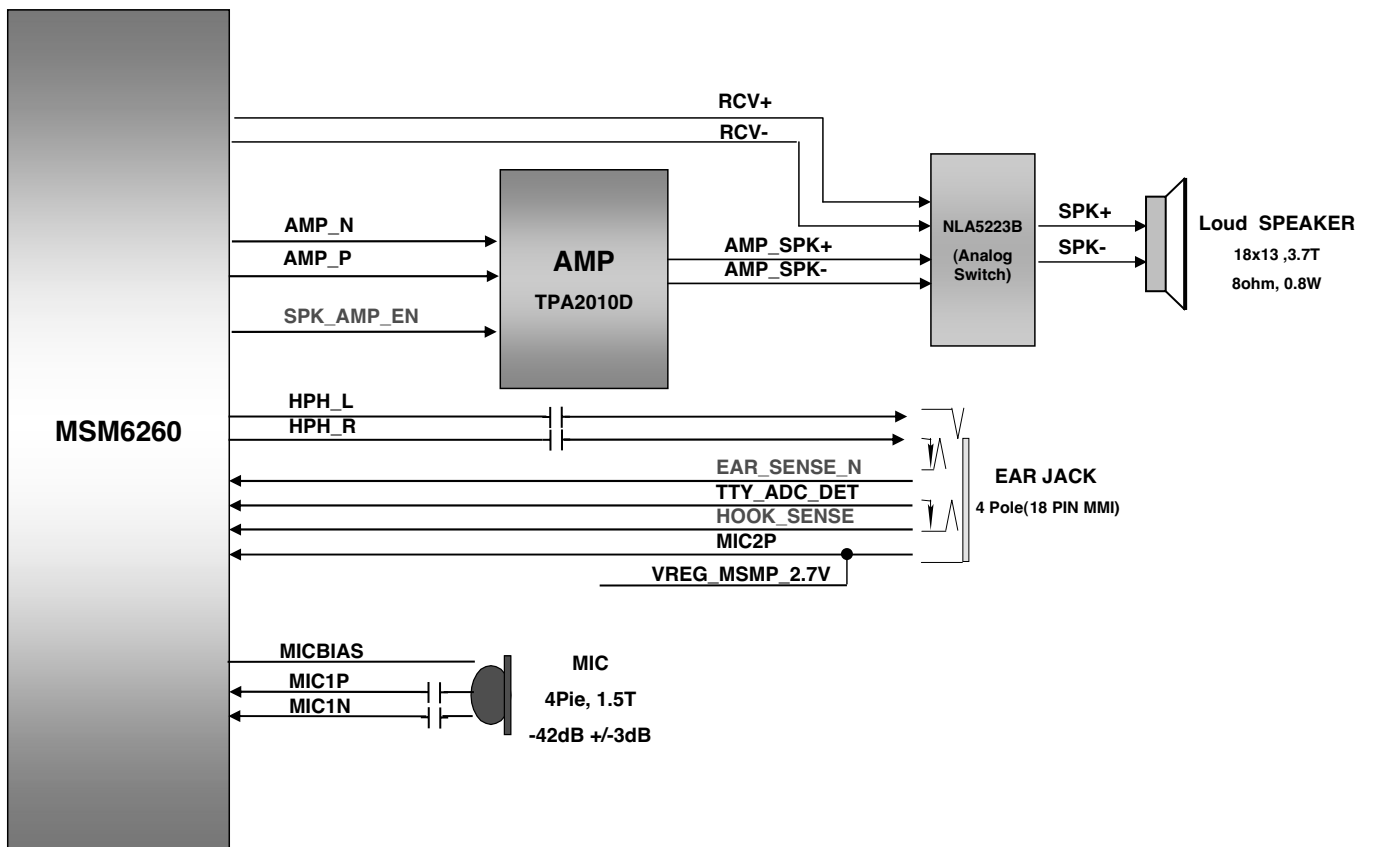


3. TECHNICAL BRIEF

3.6 Peripheral



3.7 Audio Block Diagram



3. BB Technical Description

3.8 Digital Baseband(DBB/MSM6260)

3.8.1 General Description

A. Features(MSM6260)

- Support for multimode operation - HSDPA, tri-band WCDMA (UMTS), quad GSM/GPRS/EDGE, and GPS.
- Support for HSDPA downlink up to 3.6 Mbps
- Support for WCDMA (UMTS) uplink data rate up to 384 kbps
- High-performance ARM926EJ-S running at up to 270 MHz for 3.6 Mbps HSDPA
- ARM Jazelle Java hardware acceleration for faster Java-based games and other applets
- QDSP4000 high-performance DSP cores
- Integrated gpsOne position location technology functionality
- Integrated Bluetooth 1.2 baseband processor for wireless connectivity to peripherals
- Qcamera with 30 fps QCIF viewfinder resolution, and support for 3 MP camera sensors
- Direct interface to digital camera module with video front end (VFE) image processing
- True 3D graphics for advanced wireless gaming
- SecureMSM v2.0 includes support for Open Mobile Alliance (OMA) DRM v2.0, SIM-lock and IMEI integrity. Support for Qfuse.
- Audio on par with portable music players
- Vocoder support (AMR, FR, EFR, HR)
- Advanced 14 x 14 mm, 0.5-mm pitch, 409-pin lead-free CSP packaging technology
- SD/SDIO hardware support

3. TECHNICAL BRIEF

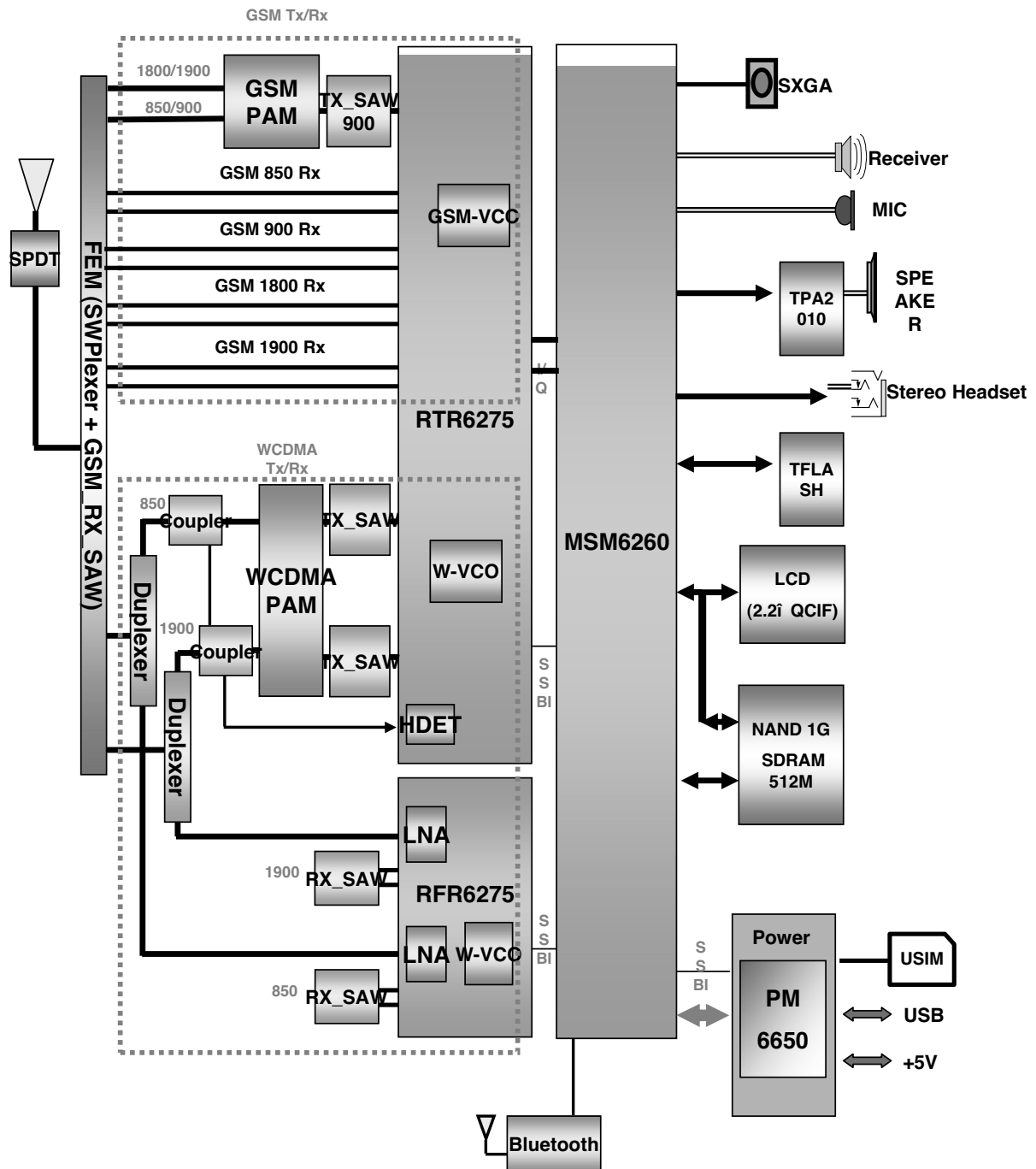


Figure. Simplified Block Diagram

3. TECHNICAL BRIEF

3.8.2 Block Diagram(MSM6260)

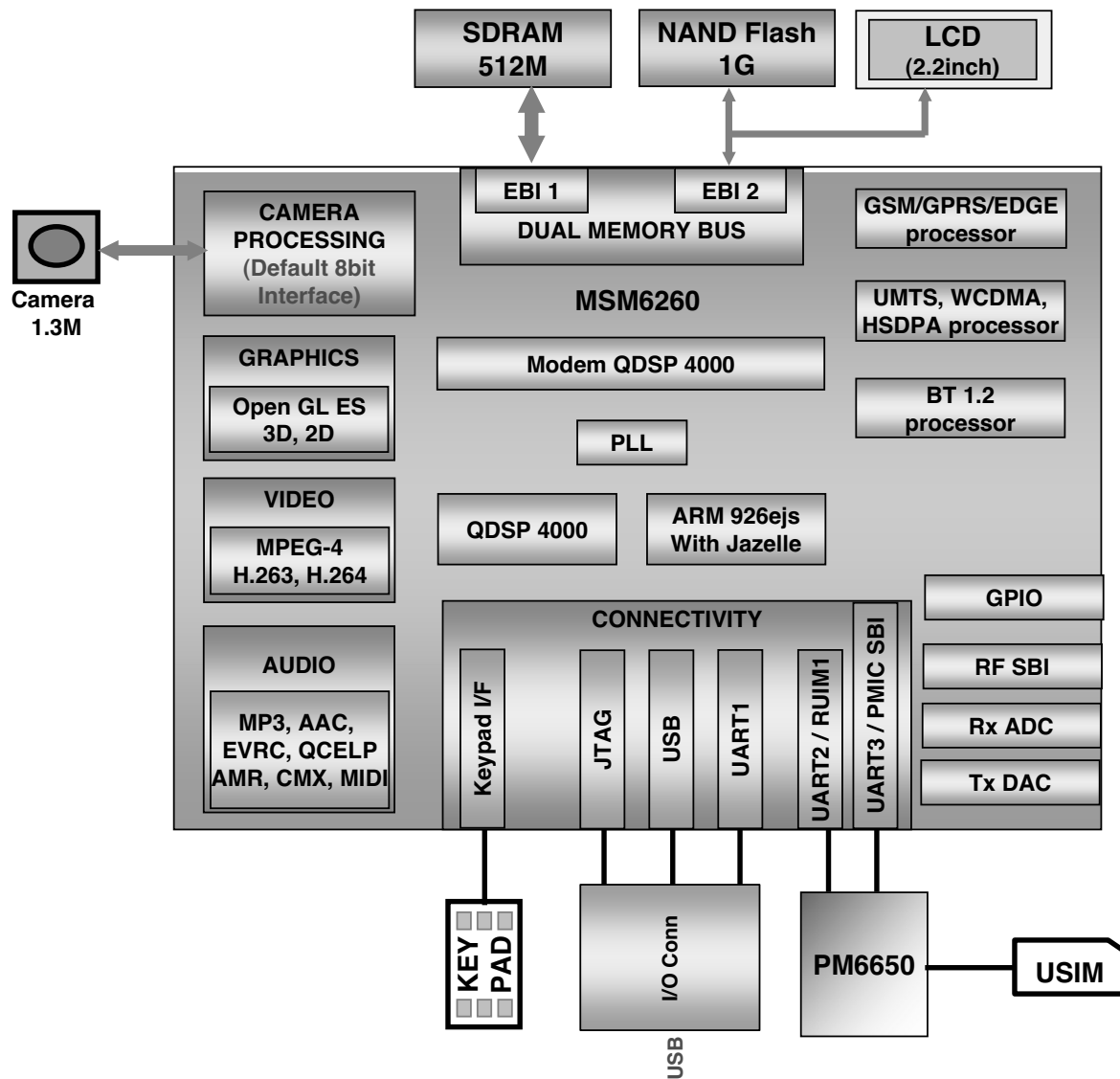


Figure. Simplified Block Diagram of MSM6260

3.9 Subsystem(MSM6260)

3.9.1 ARM Microprocessor Subsystem

The MSM6260 device uses an embedded ARM926EJ-S microprocessor. This microprocessor, through the system software, controls most of the functionality for the MSM, including control of the external peripherals such as the keypad, LCD, SDRAM, and NAND-Flash devices. Through a QUALCOMM proprietary serial bus interface (SBI) the ARM926EJ-S configures and controls the functionality of the RTR6275, RFR6275 and PM6650 devices.

3.9.2 WCDMA R99 features

The MSM6260 device supports the W-CDMA FDD release 99, including the following features:

- All modes and data rates for W-CDMA frequency division duplex (FDD), with the following restrictions:

- ☐ The downlink supports the following specifications:

- Up to four physical channels, including the broadcast channel (BCH), if present
- Up to three dedicated physical channels (DPCHs)
- Spreading factor (SF) range support from 4 to 256
- The following transmit diversity modes are supported:
 - Space time transmit diversity (STTD)
 - Time-switched transmit diversity (TSTD)
 - Closed-loop feedback transmit diversity (CLTD)

- The uplink supports the following specifications:

- ☐ The uplink provides the following UE support:

- One physical channel, eight TrCH, and 16 TrBks starting at any frame boundary
- A maximum data rate of 384 kbps

- ☐ Full SF range support from 4 to 256

- SMS (CS and PS)

- PS data rate - 384 kbps DL / 384 kbps UL

- CS data rate - 64 kbps DL / 64 kbps UL

- AMR (all rates)

3.9.3 GSM features

The following GSM modes and data rates are supported by the MSM6260 device hardware.

Support modes conform to release '99 specifications of the sub-feature.

- Voice features

- ☐ FR
- ☐ EFR
- ☐ AMR
- ☐ HR
- ☐ A5/1, A5/2, and A5/3 ciphering

3. TECHNICAL BRIEF

- Circuit-switched data features

- ☐ 9.6k
- ☐ 14.4k
- ☐ Fax
- ☐ Transparent and non-transparent modes for CS data and fax
- ☐ No sub-rates are supported.

3.9.4 GPRS features

- Packet switched data (GPRS)

- ☐ DTM (Simple Class A) operation
- ☐ Multi-slot class 12 data services
- ☐ CS schemes: CS1, CS2, CS3, and CS4
- ☐ GEA1, GEA2, and GEA3 ciphering

- Maximum of four Rx timeslots per frame

3.9.5 EDGE features

- EDGE E2 power class for 8 PSK
- DTM (simple Class A), multi-slot class 12
- Downlink coding schemes - CS 1-4, MCS 1-9
- Uplink coding schemes - CS 1-4, MCS 1-9
- BEP reporting
- SRB loopback and test mode B
- 8-bit, 11-bit RACH
- PBCCH support
- 1 phase/2 phase access procedures
- Link adaptation and IR
- NACC, extended UL TBF.

3.9.6 MSM6260 device audio processing features

- Integrated wideband stereo CODEC

- ☐ 16-bit DAC with typical 88 dB dynamic range
- ☐ Supports sampling rates up to 48 kHz on the speaker path and 16 kHz on the microphone path

- VR- Voice mail + voice memo

- Acoustic echo cancellation

- Audio AGC

- Audio Codecs: AMR-NB, AAC, AAC Plus, Enhanced AAC Plus, Windows Audio v9, Real Audio 8 (G2)

- Internal vocoder supporting AMR, FR, EFR, and HR

3.9.7 MSM6260 microprocessor subsystem

- Industry standard ARM926EJ-S embedded microprocessor subsystem
 - 16 kB instruction and 16 kB data cache
 - Instruction set compatible with ARM7TDMI®
 - ARM version 5TEJ instructions
 - Higher performance 5 stage pipeline, Harvard cached architecture
 - Higher internal CPU clock rate with on-chip cache
- Java hardware acceleration
- Enhanced memory support
- 75 MHz and 90 MHz bus clock for SDRAM
- 32-bit SDRAM
- Dual memory buses separating the high-speed memory subsystem (EBI1) from low-speed peripherals (EBI2) such as LCD panels
- 1.8 V memory interface support for EBI1 and 1.8V or 2.6V memory interface support for EBI2
- NAND FLASH memory interface
 - 8/16-bit data I/O width NAND flash support
 - 1- or 4-bit ECC
 - 512-byte/2KB page-size support
 - 2 chip selects supported for NAND Flash
 - Boot from NAND
 - Low-power SDRAM (LP-SDRAM) interface
- Internal watchdog and sleep timers

3.9.8 Supported interface features

- USB On-the-Go core supports both slave and host functionality
- Three universal asynchronous receiver transmitter (UART) serial ports
- USIM controller (via UART)
- Integrated 4-bit secure digital (SD) controller for SD and Mini SD cards
- Parallel LCD interface
- General-purpose I/O pins
- External keypad interface

3.9.9 Supported multimedia features

- Provide additional general purpose MIPS by using:
 - Two QDSP4000s
 - Dedicated hardware accelerators and compression engines
- Improve Java, BREW, and game performance
 - Integrated Java and 2D/3D graphics accelerator with Sprite engine
- Enable various accessories via USB host connectivity.
 - Integrated USB host controller functionality
- Enable compelling visual and audio applications.

3. TECHNICAL BRIEF

Qcamera™

- High-quality digital camera processing, supporting CCD or CMOS image sensors up to 3 MP
- 30 fps QCIF viewfinder

Qtv™

- Audio and video decoder that supports VOD, MOD and Broadcast multimedia services.
- Audio CODECs supported: AMR-NB, AAC, AAC Plus, Enhanced AAC Plus, Windows® Audio v9, RealAudio® v8
- Integrated stereo wideband Codec for music/digital clips
- CMX
- Video Codecs supported: MPEG-4, H.263, H.264, Windows Media® v9 and RealNetworks® v10

Video telephony services: Qvideophone™

- A two-way mobile video conferencing solution that delivers 15 fps @ QCIF, 64kbps
- Video CODECs supported: MPEG-4 and H.263
- Audio CODECs supported: AMR-NB.

Qcamcorder™

- Real time mobile video encoder
- Video CODECs supported: MPEG-4, H.263
- Audio CODECs supported: AMR-NB
- Recording performance: 15 fps @ QCIF, 192 kbps
- Video telephony at 15 frames per second(fps), QCIF resolution video encode at 15 fps at QCIF for camcorder capability
- Video decode at 15 fps at QCIF resolution, streaming or offline

gpsOne™

- Integrated gpsOne processing
- Standalone gpsOne mode in which the handset acts as a GPS receiver

CMX™ (MIDI and still image, animation, text, LED/vibrate support)

- 72 simultaneous polyphonic tones
- 44 kHz sampling rate
- 512 kB wave table
- Support of universal file formats
 - ☐ Standard MIDI Format (SMF)
 - ☐ SP-MIDI
 - ☐ SMAF® Audio playback (MA-2, MA-3, MA-5)
 - ☐ XMF/DLS
 - ☐ MFi (requires Docomo license)

3. TECHNICAL BRIEF

- PNG decoder
- Pitch bend range support
- LED/vibrate support
- Scalable Vector Graphics (SVG- Tiny 1.1 + SVG Tiny 1.2)
- MLZ decoder
- Integrated PNG/SAF A.T.

| Features | MSM6260 |
|--|---|
| Modem | Tri-band WCDMA Quad-band GSM/GPRAS/EDGE HEDGE 3.6 Mbps HSDPA GPS DTM |
| Processor | ARM926 EJ-S-270 MHz AHB-90 MHz for 3.6 Mbps HSDPA ARM926 EJ-S-225 MHz AHB-75 MHz for no HSDPA ARM926 EJ-S-122 MHz AHB-61 MHz for no HSDPA and limited multimedia QDSP-100 MHz |
| Process technology | 65nm |
| Supported RF platforms (see Description of RF configurations for platform definition) | Platform B (RTR6275+RFR6275) Platform E (RTR6275+RFR6275) Platform F (RTR6285+receive diversity) |
| HSDPA | 3.6 Mbps, category 5/6 |
| Enhanced antenna | SAIC, equalizer, receive diversity |
| Memory configuration | 8/16-bit NAND and 32-bit SDRAM (See Note 2) |
| Broadcast interface | Not supported |
| Power management IC | PMIC 6650-2 |
| USB | 3-wire USB-OTG |
| MDDI | Supported |
| Qcamera (camera interface) Viewfinder frame rate | Up to 3.0 M pixel support 30 fps @ QCIF |
| QTV (video decode) | MP3, AAC, AAC+, ADPCM, MPEG4, H.263, H.264, Real networks, Windows media, WB-AMR/+ |
| Qvideophone (video telephony) | 15 fps @ QCIF |
| LCD HW interface | Up to 24 bpp |
| Boot mode | Trusted boot mode only |

Table. Summary of MSM6260 device features

3. TECHNICAL BRIEF

3.9.10 Serial Bus Interface(SBI)

The MSM6260 device's SSBI is designed specifically to be a quick, low pin count control protocol for QUALCOMM's RTR6275, RFR6275 and PM6650 ASICs. Using the SSBI, the RTR6275, RFR6275, and PM6650 devices can be configured for different operating modes and for minimum power consumption, extending battery life in Standby mode. The SSBI also controls DC baseband offset errors.

3.9.11 Wideband CODEC

The MSM6260 device integrates a wideband voice/audio CODEC into the mobile station modem (MSM). The CODEC supports two differential microphone inputs, one differential earphone output, one single-ended earphone output, and a differential analog auxiliary interface.

The CODEC integrates the microphone and earphone amplifiers into the MSM6260 device, reducing the external component count to just a few passive components. The microphone (Tx) audio path consists of a two-stage amplifier with the gain of the second stage set internally. The Rx/Tx paths are designed to meet the ITU-G.712 requirements for digital transmission systems.

3.9.12 Vocoder Subsystem

The MSM6260 device's QDSP4000 supports AMR,FR,EFR and HR. In addition, the QDSP4000 has modules to support the following audio functions: DTMF tone generation, DTMF tone detection, Tx/Rx volume controls, Tx/Rx automatic gain control (AGC), Rx Automatic Volume Control (AVC), EarSeal Echo Canceller (ESEC), Acoustic Echo Canceller (AEC), Noise Suppression (NS), and programmable, 13-tap, Type-I, FIR, Tx/Rx compensation filters. The MSM6260 device's integrated ARM9TDMI processor downloads the firmware into the QDSP4000 and configures QDSP4000 to support the desired functionality.

3.9.13 ARM Microprocessor subsystem

The MSM6260 device uses an embedded ARM926EJ-S microprocessor. This microprocessor, through the system software, controls most of the functionality for the MSM device, including control of the external peripherals such as the keypad, LCD, RAM, ROM, and EEPROM devices.

Through a generic single serial bus interface (SSBI) the ARM926EJ-S configures and controls the functionality of the RFR6275, RTR6275, and PM6650 devices.

3.9.14 Mode Select and JTAG Interfaces

The mode pins to the MSM6260 device determine the overall operating mode of the ASIC. The options under the control of the mode inputs are Native mode, which is the normal subscriber unit operation, ETM mode, which enables the built-in trace mode, and test mode for factory testing.

The MSM6260 device meets the intent of the ANSI/IEEE 1149.1A-1993 feature list. The JTAG interface can be used to test digital interconnects between devices within the mobile station during manufacture.

3.9.15 General-Purpose Input/Output Interface

The MSM6260 device has general-purpose bidirectional input/output pins. Some of the GPIO pins have alternate functions supported on them. The alternate functions include USB interface, additional RAM, ROM, general-purpose chip selects, parallel LCD interface, and a UART interface. The function of these pins is documented in the various software releases.

3.9.16 UART

The MSM6260 device employs three UARTs. UART1 has dedicated pins while UART2 and UART3 share multiplexed pins.

- UART1 for data
- UART2 (can be used for USIM interface)
- UART3 for data

3.9.17 USB

The MSM6260 device integrates a universal serial bus (USB) controller that supports both unidirectional and bidirectional transceiver interfaces. The USB controller acts as a USB peripheral communicating with the USB host.

3. TECHNICAL BRIEF

3.10 Power Block

3.10.1 General

MSM6260, included RF, is fully covered by PM6650(Qualcomm PMIC). PM6650 cover the power of MSM6260, MSM memory, RF block, Bluetooth, Micro SD, USIM and TCXO.

Major power components are :

PM6650(U701) : Phone power supply

AAT3152IWP(U401) : LCD Backlight charge pump

BH28FB1WHFV(U402) : LCD LDO

MIC2211-LGYML(U404) : Camera dual LDO

3.10.2 PM6650

The PM6650 device (Figure 1-1) integrates all wireless handset power management. The power management portion accepts power from all the most common sources - battery, external charger, adapter, coin cell back-up - and generates all the regulated voltages needed to power the appropriate handset electronics. It monitors and controls the power sources, detecting which sources are applied, verifying that they are within acceptable operational limits, and coordinates battery and coin cell recharging while maintaining the handset electronics supply voltages. Eight programmable output voltages are generated using low dropout voltage regulators, all derived from a common trimmed voltage reference.

A dedicated controller manages the TCXO warm-up and signal buffering, and key parameters (under-voltage lockout and crystal oscillator signal presence) are monitored to protect against detrimental conditions. MSM device controls and statuses the PM6650 IC using Single Serial Bus Interface (SSBI) supplemented by an Interrupt Manager for time-critical information. Another dedicated IC Interface circuit monitors multiple trigger events and controls the power-on sequence.

3. TECHNICAL BRIEF

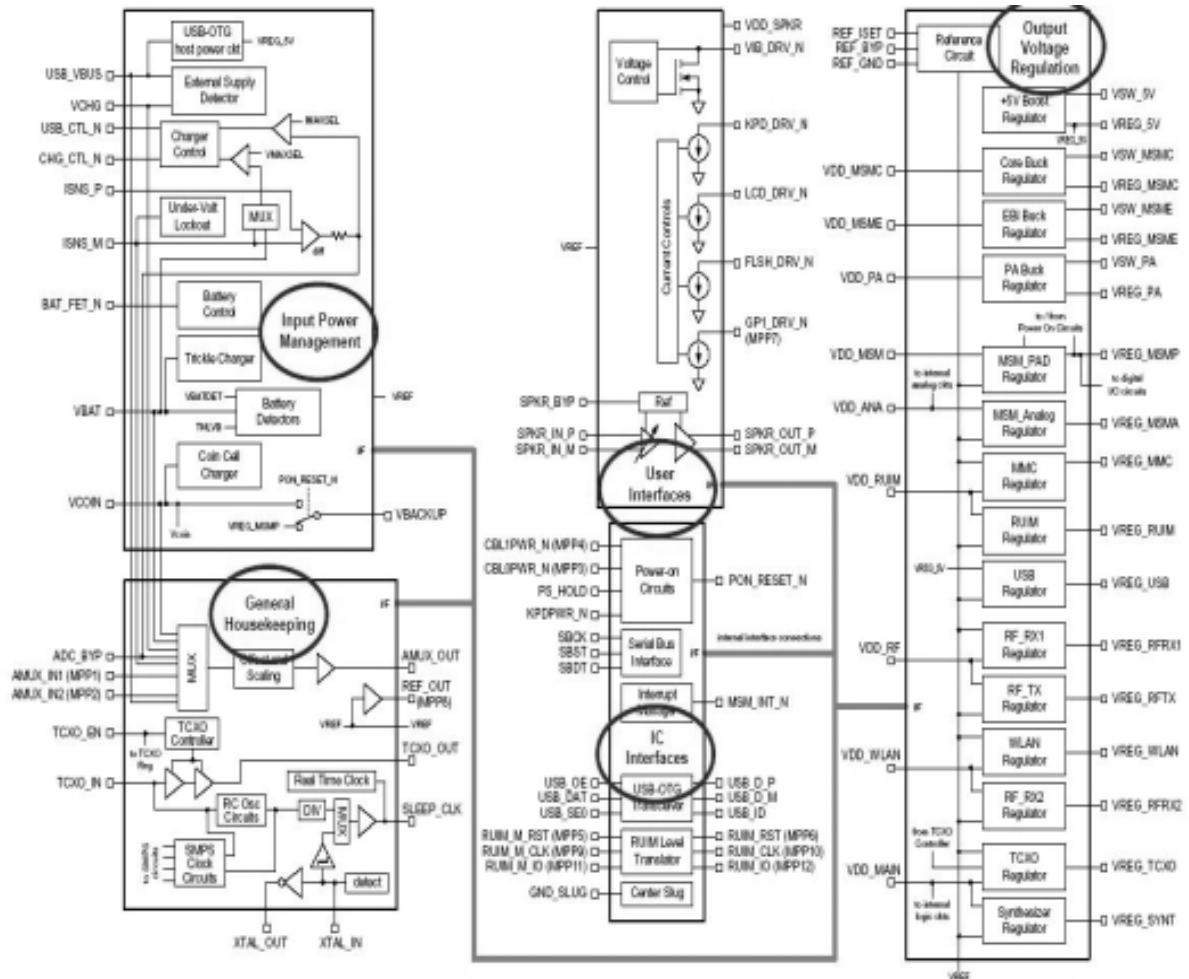
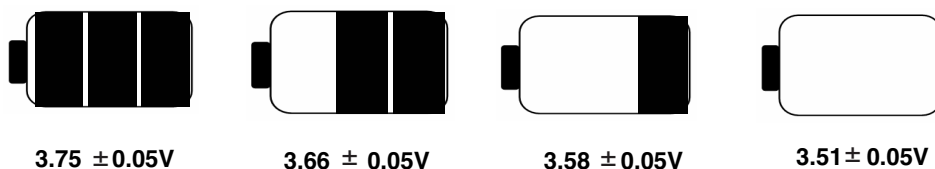
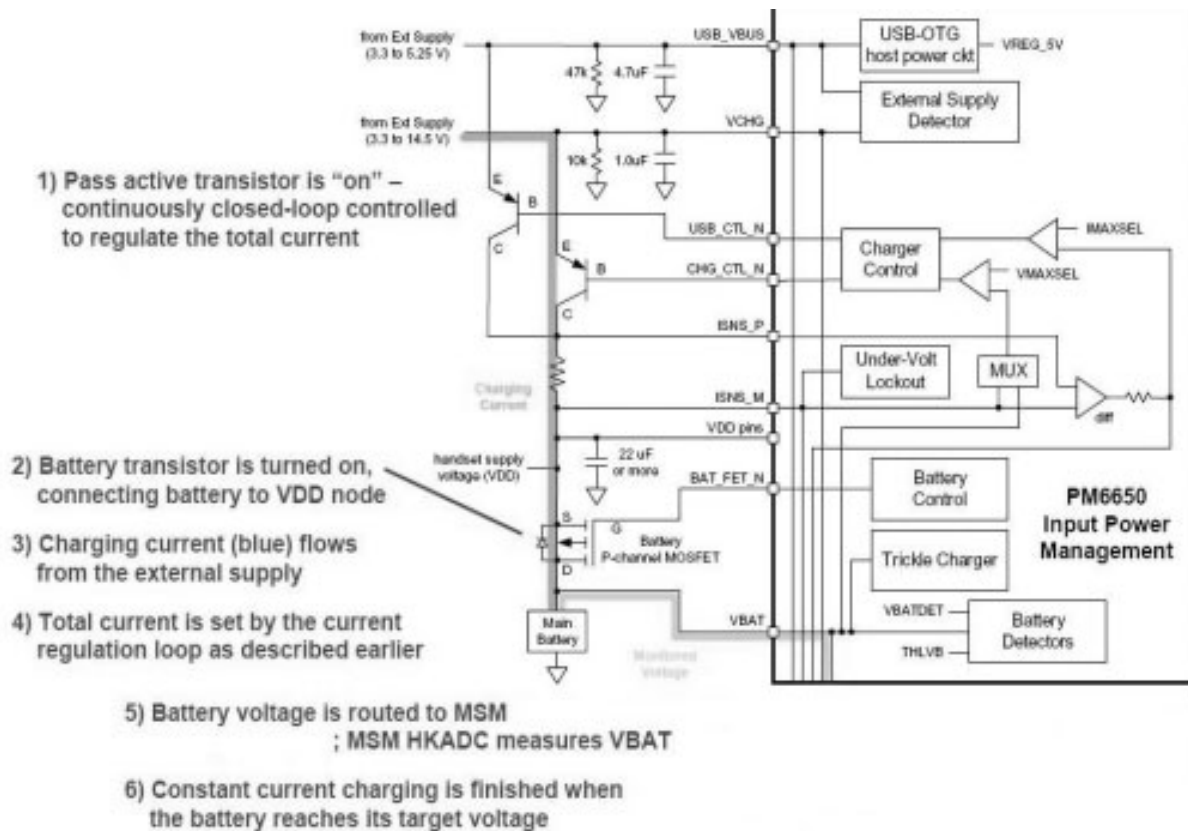


Figure. PM6650 Functional Block Diagram

3. TECHNICAL BRIEF

3.10.3 Charging control

A programmable charging block in PM6650 is used for battery charging. It is possible to set limits for the charging current. The external supply typically connects directly to pin (VCHG). The voltage on this pin (VCHG) is monitored by detection circuitry to ascertain whether a valid external supply is applied or not. For additional accuracy or to capture variations over time, this voltage is routed internally to the housekeeping ADC via the analog multiplexer. PM6650 circuits monitor voltages at VCHARGER and ICHARGE pins to determine which supply should be used and when to switch between the two supplies. These pins are connected to the Source (or emitter) and Drain (or collector) contacts of the pass transistor respectively.

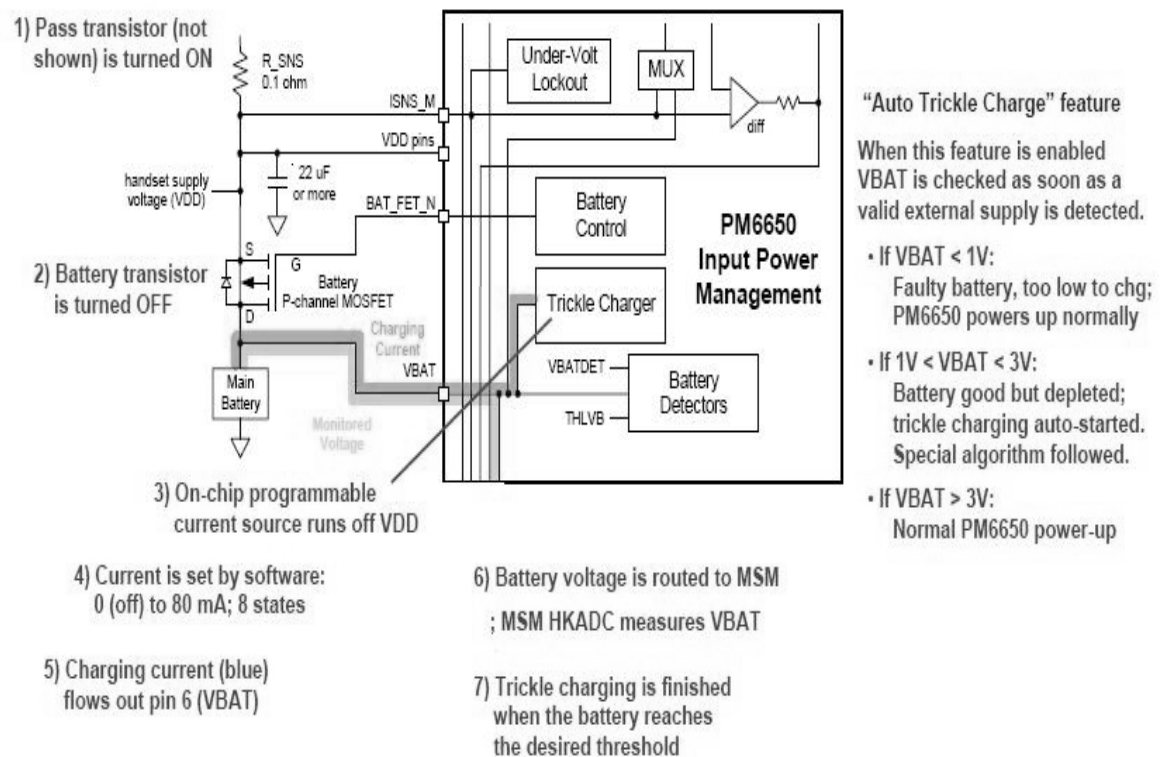


CU575 Battery Bar Display(Stand By Condition)

Trickle Charging

Trickle Charging of the main battery, enabled through SBI control and powered from V_{DD} , is provided by the PM6650 IC. The trickle charger is on-chip programmable current source that supplies current from V_{DD} to pin (VBAT). Trickle charging can be used for lithium-ion and nickel-based batteries, with its performance specified below (3.2V). The charging current is set to 80mA.

| Parameter | Min | Typ | Max | Unit |
|-----------------|-----|-----|-----|------|
| Trickle Current | 60 | 80 | 100 | mA |



3. TECHNICAL BRIEF

Constant Current Charging

The PM6650 IC supports constant current charging of the main battery by controlling the charger pass transistor and the battery transistor. The constant current charging continues until the battery reaches its target voltage, 4.2V.

Constant Voltage Charging

Constant voltage charging begins when the battery voltage reaches a target voltage, 4.2V.

The end of constant voltage charging is commonly detected 10% of the full charging current (110mA)

- Charging Method : CC & CV (Constant Current & Constant Voltage)
- Maximum Charging Voltage : 4.2V
- Maximum Charging Current : 600mA
- Nominal Battery Capacity : 970 mAh
- Charger Voltage : 5.1V
- Charging time : Max 3h (Except time trickle charging)
- Full charge indication current (icon stop current) : 110mA
- Low battery POP UP : Idle - 3.51V, Dedicated(GSM/WCDMA) - 3.58V
- Low battery alarm interval : Idle - 3 min, Dedicated - 1min
- Cut-off voltage : 3.28V

3.11 External memory interface

A. MSM6260

The MSM6260 device was designed to provide two distinct memory interfaces. EBI1 was targeted for supporting high speed synchronous memory devices. EBI2 was targeted towards supporting slower asynchronous devices such as LCD, NAND flash, SRAM, etc.

- EBI1 Features

- 16 bit static and dynamic memory interface
- 32 bit dynamic memory interface
- 24 bits of address for static memory devices which can support up to 32MBytes on each chip select
- Synchronous burst memories supported (burst NOR, burst PSRAM)
- Synchronous DRAM memories supported
- Byte addressable memory supporting 8 bit, 16 bit and 32 bit accesses
- Pseudo SRAM (PSRAM) memory support

- EBI2 Features

- Support for asynchronous FLASH and SRAM(16bit & 8bit).
- Interface support for byte addressable 16bit devices(UB_N & LB_N signals).
- 2Mbytes of memory per chip select.
- Support for 8 bit/16bit wide NAND flash.
- Support for parallel LCD interfaces, port mapped or memory mapped(18 or 16 bit)

- 1Gb NAND(16bit) flash memory + 512Mb SDRAM (32bit)

- 1-CS(Chip Select) are used

| Interface Spec | | | | |
|----------------|----------------|---------|------------------|-------------------|
| Device | Part Name | Maker | Read Access Time | Write Access Time |
| FLASH | TY90009800J0GG | Toshiba | 50 ns | 50 ns |
| SDRAM | TY90009800J0GG | Toshiba | 15 ns | 15 ns |

Table#1. External memory interface for CU575

3. TECHNICAL BRIEF

3.12 H/W Sub System

3.12.1 RF Interface

A. RTR6275(WCDMA_Tx, GSM_Tx/Rx)

MSM6260 controls RF part(RTR6275) using these signals.

- SBST : SSBI I/F signals for control Sub-chipset
- PA_ON1, PA_ON2 : Power AMP on RF part
- RX0_I/Q_M/P, TX_I/Q_M/P: I/Q for T/Rx of RF
- TX_AGC_ADJ : control the gain of the Tx signal prior to the power amplifier

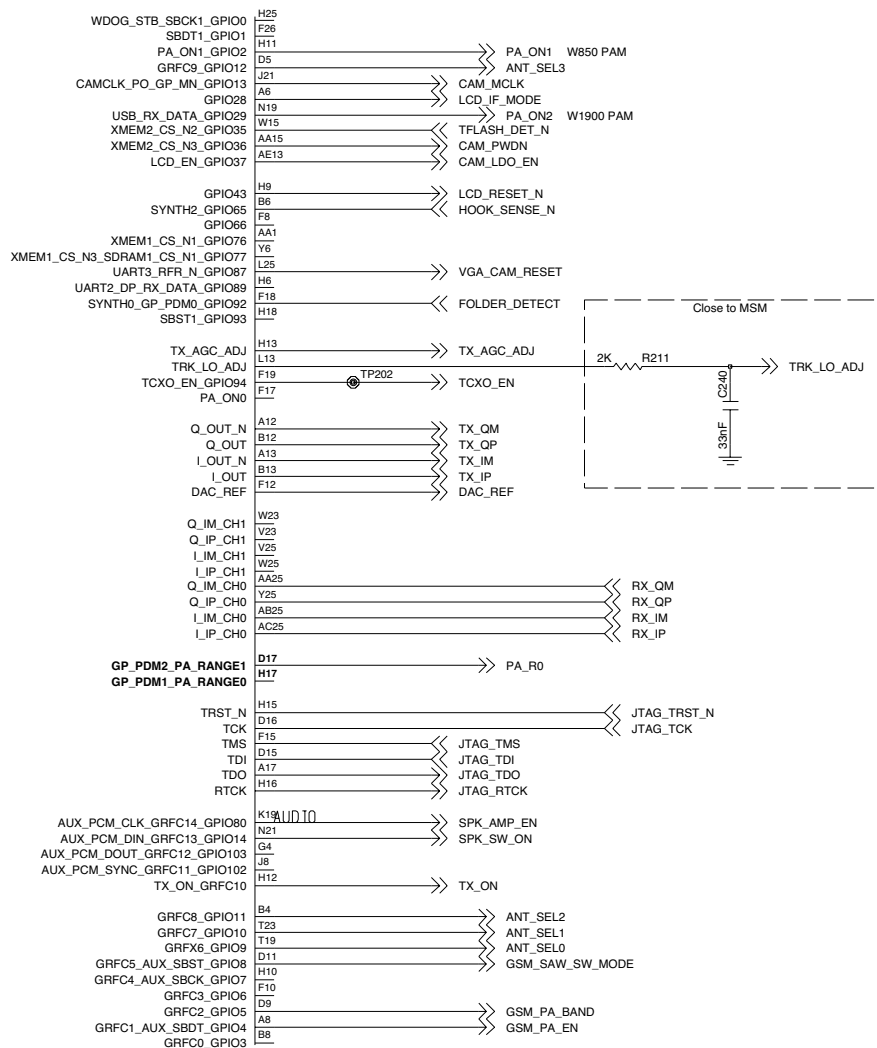


Figure. Schematic of RF Interface of MSM6260

B. RFR6275(WCDMA_Rx)

- SBDT: SSBI I/F signals for control Sub-chipset
- RX0_I/Q_M/P : I/Q for Rx of RF

C. the others

- TRK_LO_ADJ : TCXO(19.2M) Control
- PA_ON1 : WCDMA(850) TX Power Amp Enable
- PA_ON2: WCDMA(1900) TX Power Amp Enable
- ANT_SEL[0-3] : Ant Switch Module Mode Selection(WCDMA,GSM Tx/Rx,DCS-PCS Tx/Rx)
- GSM_PA_BAND : GSM/DCS-PCS Band Selection of Power Amp
- GSM_PA_RAMP : Power Amp Gain Control of APC_IC
- GSM_PA_EN : Power Amp Gain Control Enable of APC_IC
- GSM_SAW_SW_MODE: GSM SAW Filter Switch

3. TECHNICAL BRIEF

3.12.2 MSM Sub System

3.12.2.1 USIM Interface

SIM interface scheme is shown in Figure.

And, there control signals are followed

- USIM_CLK : USIM Clock
- USIM_Reset : USIM Reset
- USIM_Data : USIM Data T/Rx

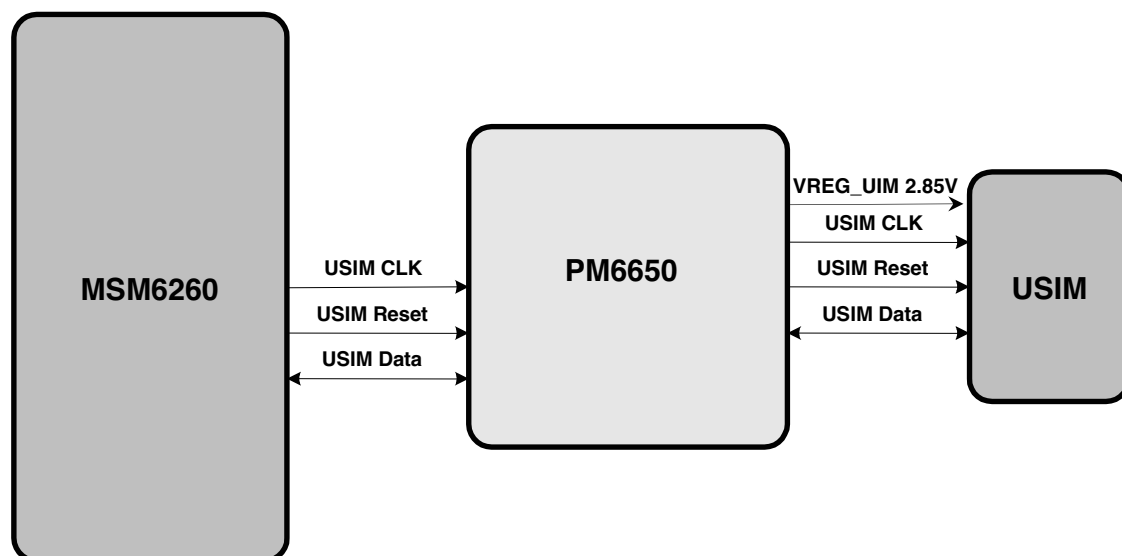


Figure. SIM Interface

3.12.2.2. UART Interface

UART signals are connected to MSM GPIO through IO connector with 115200 bps speed.

| GPIO_Map | Name | Note |
|----------|----------|---------|
| GPIO_96 | UART_RXD | Data_Rx |
| GPIO_95 | UART_TXD | Data_Tx |

Table. UART Interface

3.12.2.3. USB

The MSM6260 device contains a Universal Serial Bus (USB) interface to provide an efficient interconnect between the mobile phone and a personal computer (PC). The USB interface of the MSM6260 was designed to comply with the definition of a peripheral as specified in USB Specification, Revision 1.1. Therefore, by definition, the USB interface is also compliant as a peripheral with the USB Specification, Revision 2.0. The USB Specification Revision 1.1 defines two speeds of operation, namely low-speed (1.5 Mbps) and full-speed (12 Mbps), both of which are supported by the MSM6260.

| Name | Note |
|----------|-------------------------------|
| USB_DAT | Data to/from MSM |
| USB_SE0 | Data to/from MSM |
| USB_OE_N | Out-Put Enable of Transceiver |
| USB_VBUS | USB_Power From Host(PC) |
| USB_D+ | USB Data+ to Host |
| USB_D- | USB Data- to Host |

Table. USB Signal Interface

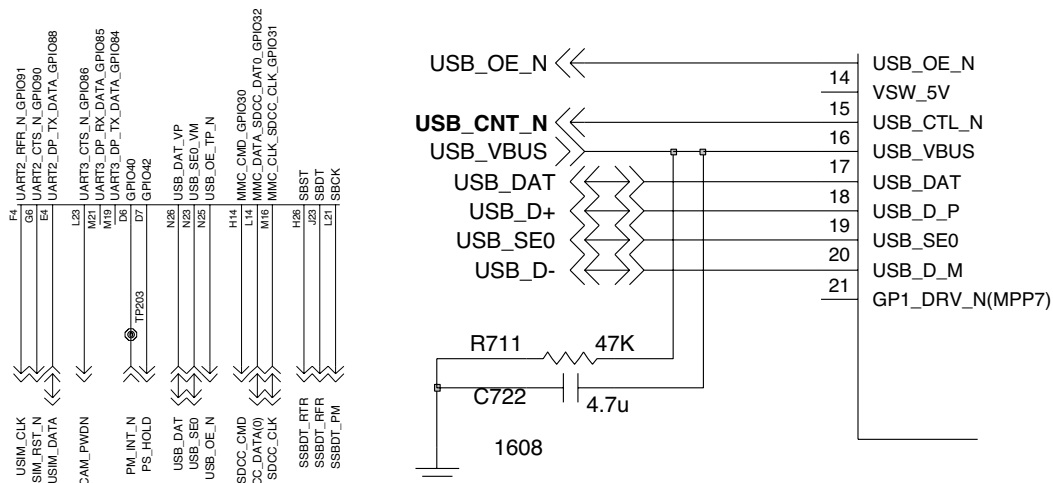


Figure. Schematic of USB block(MSM6260Side & PM6650 Side)

3. TECHNICAL BRIEF

3.12.3 HKADC(House Keeping ADC)

The MSM6260 device has an on-chip 8-bit analog-to-digital converter (HKADC) which is tended to digitize DC signals corresponding to analog parameters such as battery voltage, temperature, and RF power levels. The MSM6260 device has six analog input pins which are multiplexed to the input of the internal HKADC.

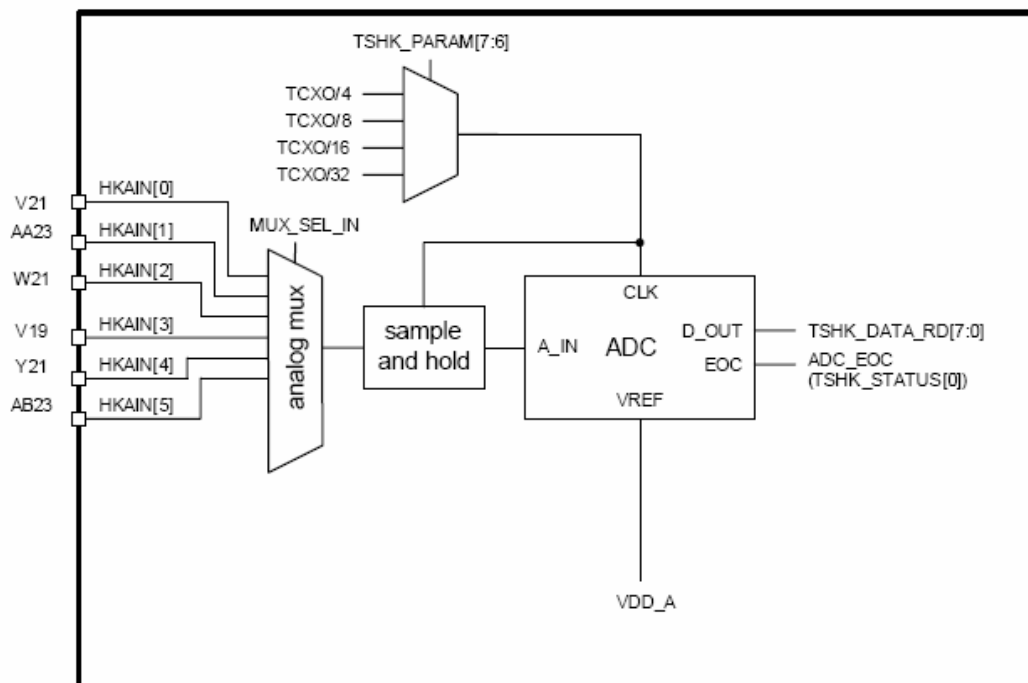


Figure. MSM6260HKADC Block diagram

| Channel | Signal | Note |
|---------|-------------|----------------------------|
| HKADC0 | AMUX_OUT | |
| HKADC1 | VBATT_SENSE | Battery voltage level |
| HKADC2 | No use | |
| HKADC3 | TTY_ADC_DET | Ear jack Detection for TTY |
| HKADC4 | PCB_Rev_ADC | PCB Version Check |
| HKADC5 | VBATT_TEMP | Battery Temperature Check |

Table. HKADC channel table

3.12.4 Key Pad

There are 24 buttons, 3 side keys and touch keys in Figure. Shows the Keypad circuit. 'END' Key is connected On_SW to PMIC(PM6650).

| | COL0 | COL1 | COL2 | COL3 | COL4 | COL5 |
|------|------|------|-------|------|--------|-------------|
| ROW0 | | | Multi | CLR | MENU | Side (up) |
| ROW1 | 1 | 2 | 3 | LEFT | UP | Side (down) |
| ROW2 | 4 | 5 | 6 | OK | Right | CAM |
| ROW3 | 7 | 8 | 9 | SEND | SEARCH | |
| ROW4 | * | 0 | # | Down | BACK | |

Table. Key Matrix Mapping Table

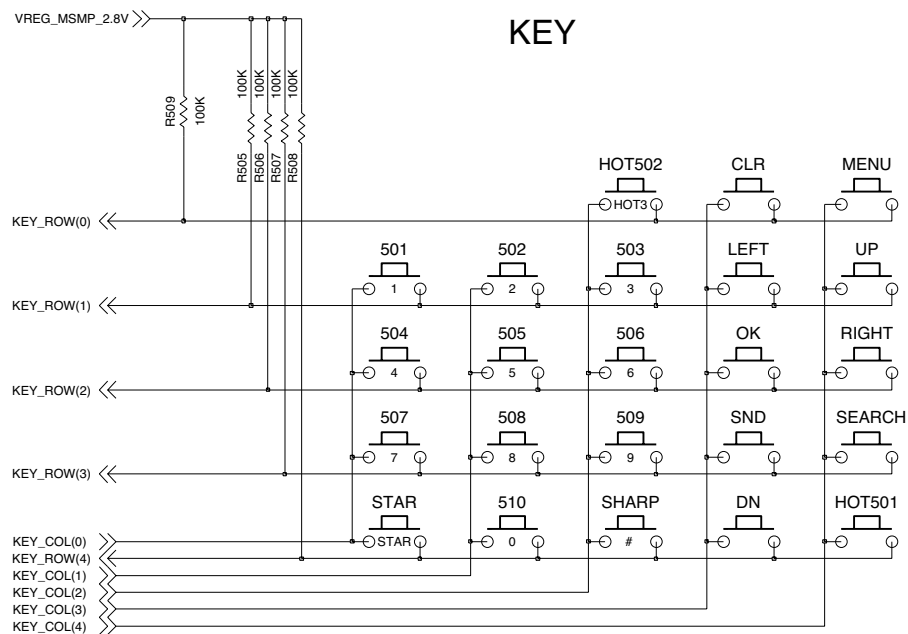


Figure. Keypad Circuit

3. TECHNICAL BRIEF

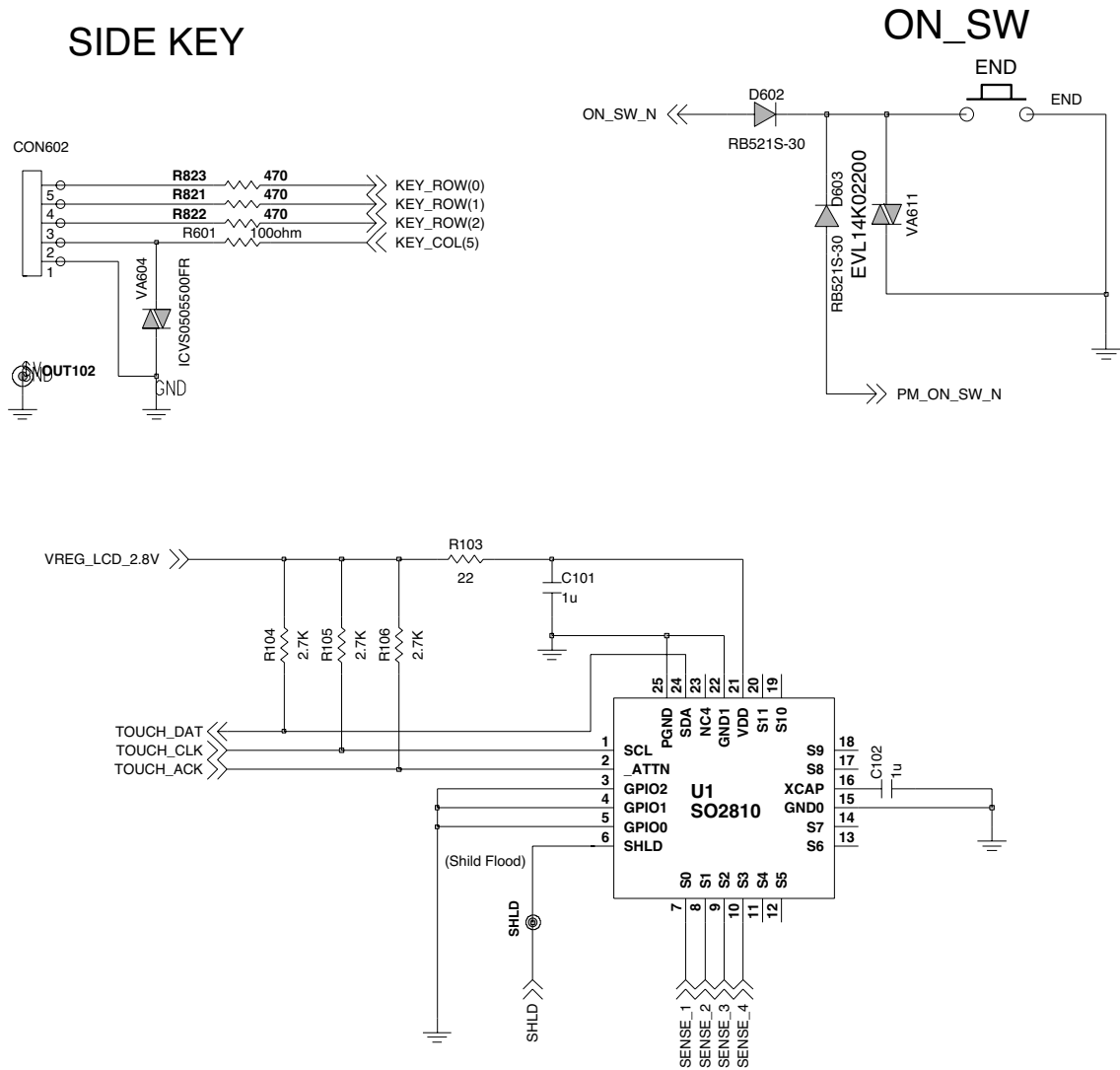
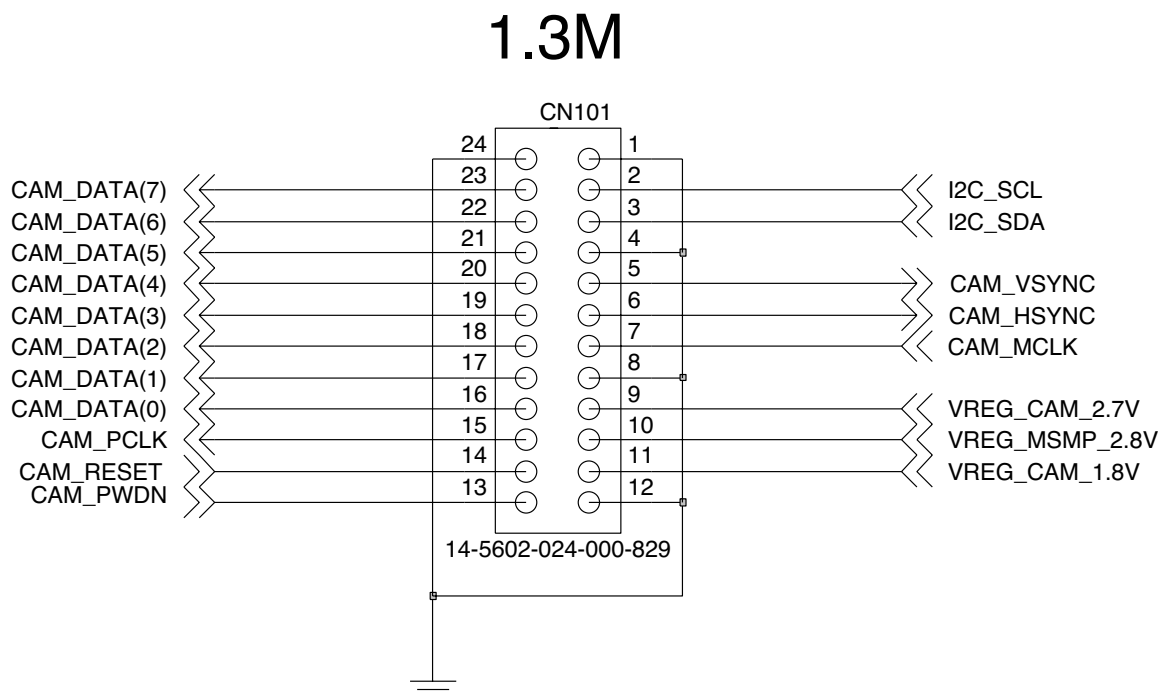


Figure. Keypad Circuit (On switch, Side KEY and Touch key)

3.12.5 Camera Interface

CU575 Installed a 1.3M Pixel SXGA Camera.

Below figure shows the camera board to board connector and camera I/F signal.



3. TECHNICAL BRIEF

The Camera module is connected to LCD FPCB with 24pin Board to Board connector. Its interface is dedicated camera interface port in MSM6260. The camera port supply 24MHz master clock to camera module and receive 48MHz pixel clock (15fps), vertical sync signal, horizontal sync signal, reset signal and 8bits data from camera module. The camera module is controlled by I2C port from MSM6260.

| No | Name | Port | Note |
|----|----------------|------|---------------------------|
| 1 | GND | GND | GND |
| 2 | I2C_CLK | I | I2C clock |
| 3 | I2C_SDA | I | I2C data |
| 4 | GND | GND | GND |
| 5 | CAM_VSYNC | O | Vertical Synch |
| 6 | CAM_HSYNC | O | Horizontal Sync |
| 7 | CAM_MCLK | I | Main clock |
| 8 | GND | GND | GND |
| 9 | VREG_CAM_2.7V | I | Camera Analog power |
| 10 | VREG_MSMP_2.8V | I | Camera I/O power |
| 11 | VREG_CAM_1.8V | I | Camera core power |
| 12 | GND | GND | GND |
| 13 | CAM_PWDN | I | Camera power down(Enable) |
| 14 | CAM_RESET | I | Camera reset |
| 15 | CAM_PCLK | O | Camera pixel clock |
| 16 | CAM_DATA(0) | O | Camera data |
| 17 | CAM_DATA(1) | O | Camera data |
| 18 | CAM_DATA(2) | O | Camera data |
| 19 | CAM_DATA(3) | O | Camera data |
| 20 | CAM_DATA(4) | O | Camera data |
| 21 | CAM_DATA(5) | O | Camera data |
| 22 | CAM_DATA(6) | O | Camera data |
| 23 | CAM_DATA(7) | O | Camera data |
| 24 | GND | GND | GND |

Table. Interface between Camera Module and LCD FPCB (in camera module)

3.12.6 Folder ON/OFF Operation

There is a magnet to detect the Folder status, opened or closed.

If a magnet is close to the hall-effect switch, the voltage at pin OUT of U405 goes to 0V. Otherwise, 2.8V. This folder signal is delivered to MSM6260 GPIO92.

FOLDER_DETECT

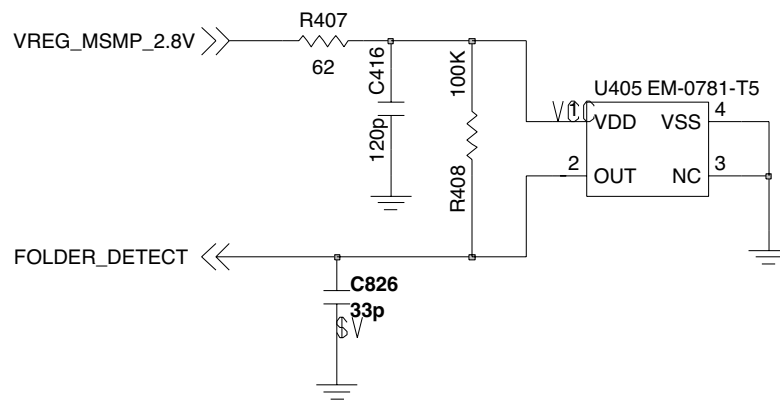


Figure. Schematic of Folder ON/OFF detection circuit

3. TECHNICAL BRIEF

3.12.7 Keypad Light

There are 2 White LEDs in main board backlight circuit, which are driven by KPD_DRV_N line from PM6650.

KEY_BACK_LIGHT

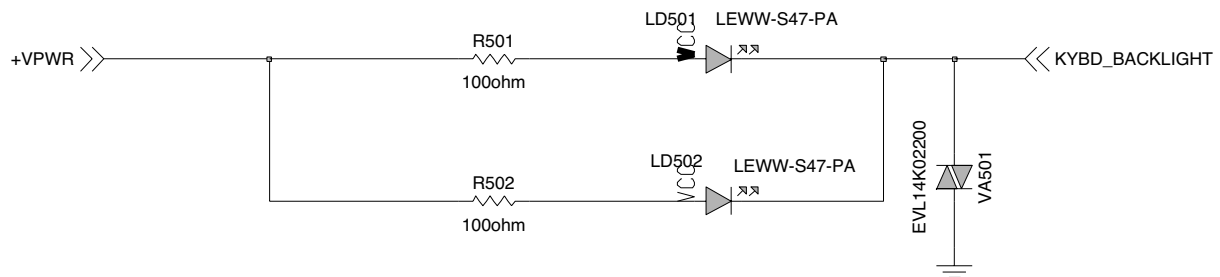


Figure. Keypad Backlight Circuit

3.12.8 LCD Module (NM220CT2 : Tovis)

- The NM220CT2 model is a Color TFT Main and TFT Sub LCD supplied by TOVIS. This main Module has a 2.2 inch diagonally measured active display area with 176(RGB)X220 resolution and sub Module has a 1.3 inch diagonally measured active display area with 128(RGB)X160 resolution. In case of Main LCD, each pixel is divided into Red, Green and Blue sub-pixels and dots which are arranged in vertical stripes.

• Features

- Display mode(Main LCD) : Normally White, Transmissive TN mode 65K colors
- Display mode(Sub LCD) : Normally White, Transmissive TN mode 65K colors
- LCD Driver IC: S1D19501(Main LCD,EPSON), R61502B(Sub LCD, Renesas)
- Driving Method : A-Si TFT Active Matrix
- 16 bit CPU interface Parallel

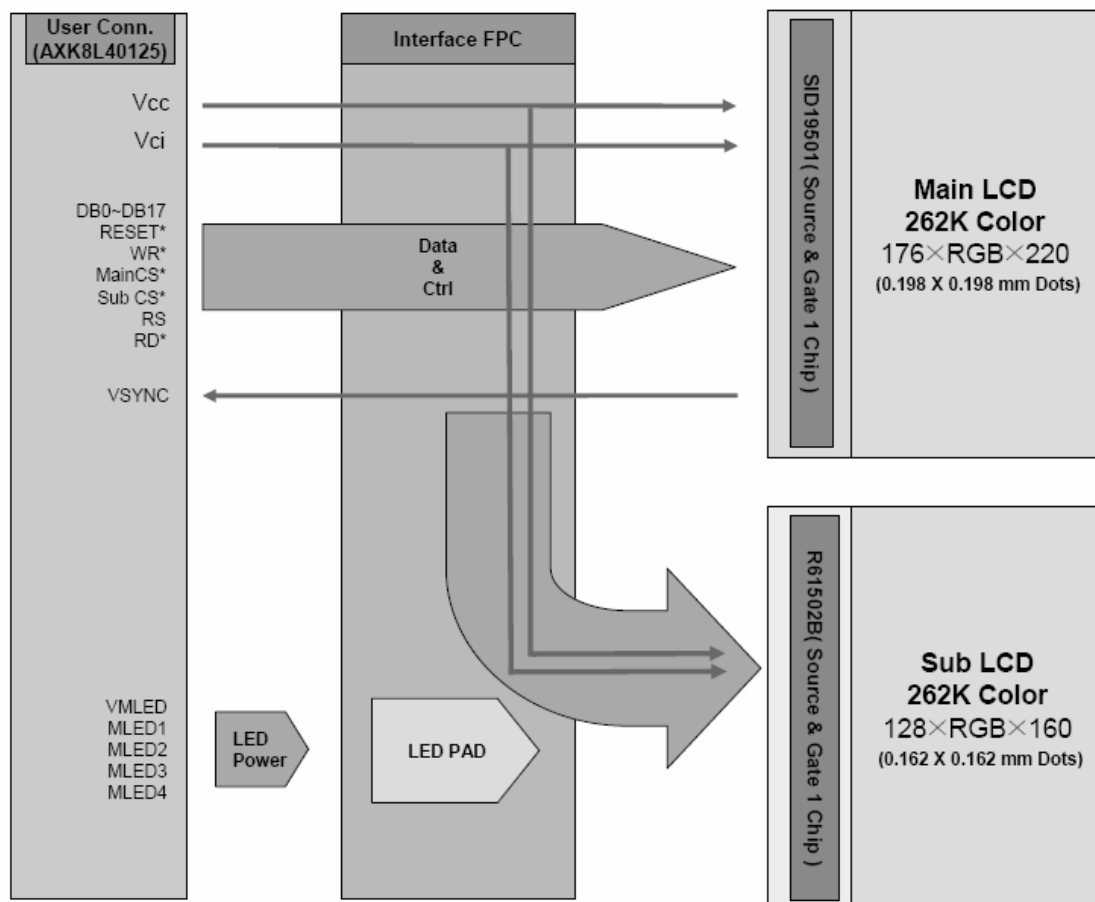


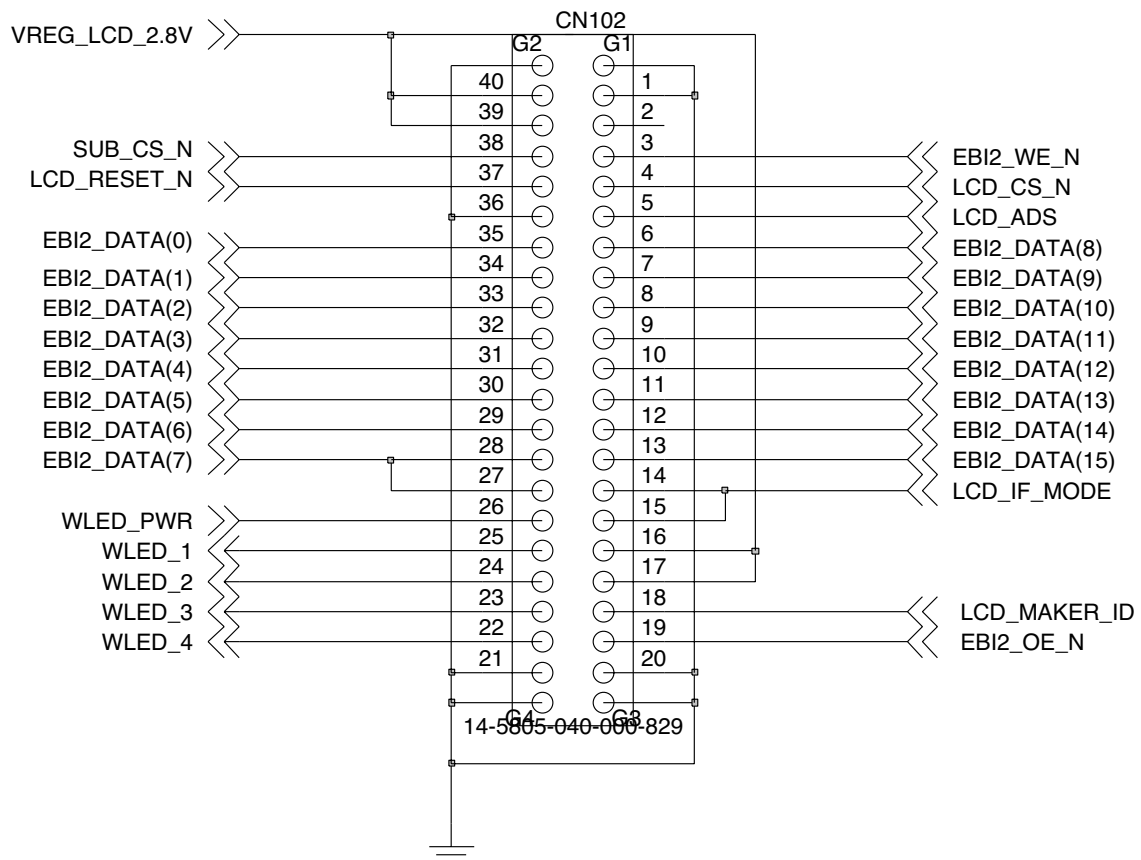
Figure. LCD Module Block Diagram

3. TECHNICAL BRIEF

3.12.9 Display & LCD FPC Interface

LCD module is connected to LCD FPCB with 40 pins B TO B connector. The LCD module is controlled by 16-bit EBI2 in MSM6260

LCD



3.12.9.1 Audio Signal Processing & Interface

Audio signal processing is divided uplink path and downlink path. The uplink path amplifies the audio signal from MIC and converts this analog signal to digital signal and then transmits it to DBB Chip (MSM6260).

This transmitted signal is reformed to fit in GSM & WCDMA frame format and delivered to RF Chipset. The downlink path amplifies the signal from DBB chip (MSM6260) and outputs it to receiver (or speaker). The receive path can be directed to either one of two earphone amplifiers or the auxiliary output. The outputs earphone1 (EAR1OP, EAR1ON) and auxiliary out (AUXOP, AUXON) are differential outputs. Earphone2 (EAR2/EAR3) is a single-ended output stage designed to drive a headset speaker.

The microphone interface consists of two differential microphone inputs, one differential auxiliary input and a two-stage audio amplifier.

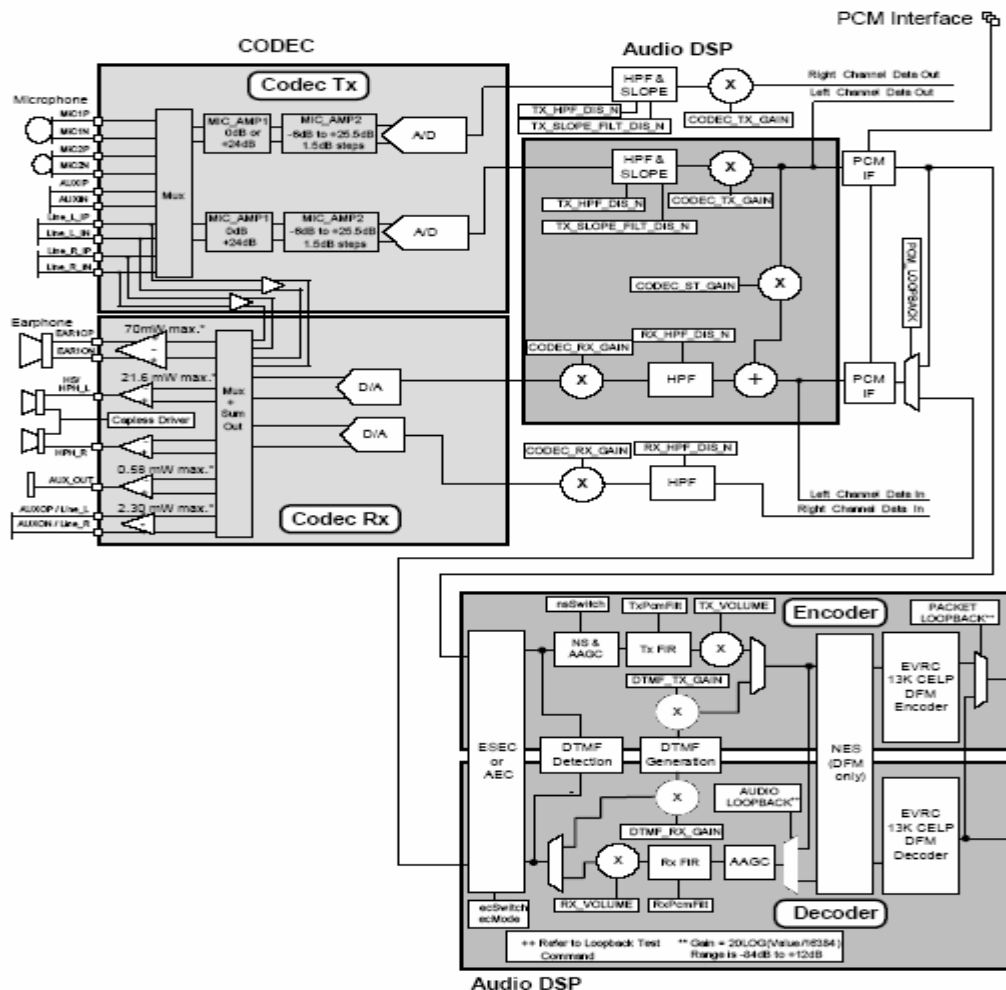
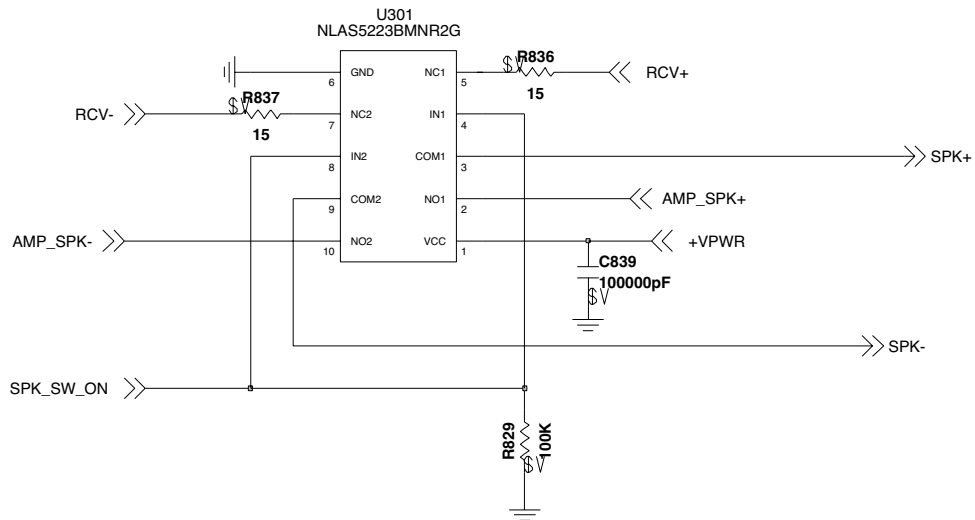


Figure. Audio Interface Detailed Diagram(MSM6260)

Select RCV / SPK



Audio AMP

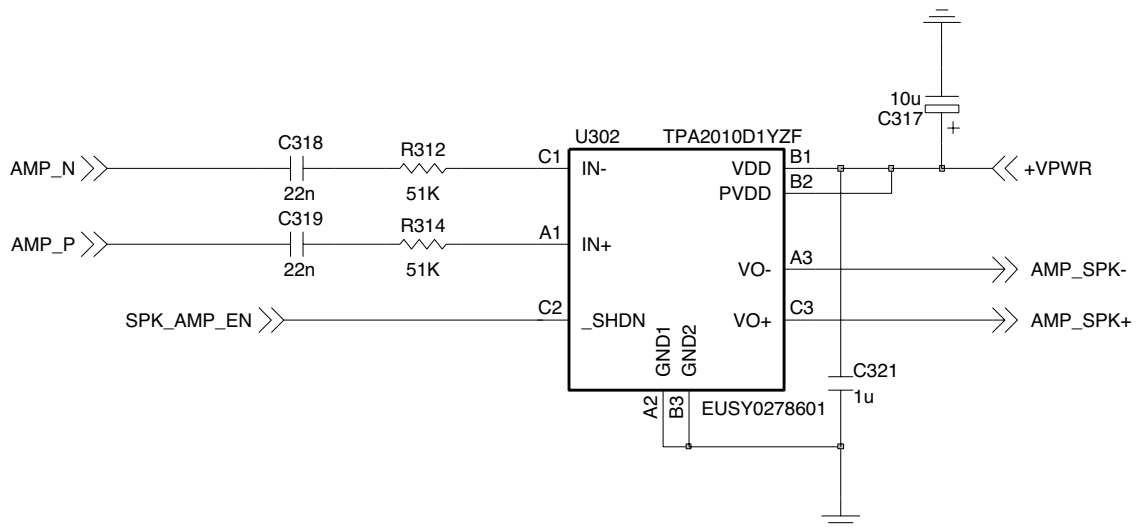


Figure . Audio part schematics

3. TECHNICAL BRIEF

3.12.9.2 Audio Mode

There are three audio modes (Voice call, speaker phone, MIDI/MP3).

| MODE | Device | Description |
|---------------|---------------|---------------------|
| Voice Call | Receiver Mode | Receiver Voice Call |
| | Loud Mode | Speaker Phone |
| | Headset | Headset Voice Call |
| Speaker phone | Loud Mode | Speaker Phone |
| MIDI | Loud Mode | Speaker MIDI Bell |
| | Headset | Headset MIDI Bell |
| MP3 | Loud Mode | Speaker MP3 |
| | Headset | Headset MP3 |

Table. Audio Mode

Audio & Sound Main Component

There are 5 main components in CU575.

| | Component | Design No. | Maker Part No. | Note |
|---|------------|-------------|-----------------|------------------------|
| 1 | MSM6260 | U201 | MSM6260 | Base-Band Modem |
| 2 | Audio amp. | U302 | TPA2010D1YZF | Class-D Audio Amp |
| 3 | Speaker | In LCD-FPCB | EMS1813VCD2P | 8 ohm Speaker/receiver |
| 4 | Microphone | U303 | SP0204LE5-PB | -42 dB microphone |
| 5 | Ear jack | CON801 | GU041-18P-E1000 | Ear jack |

Table. Audio main component list

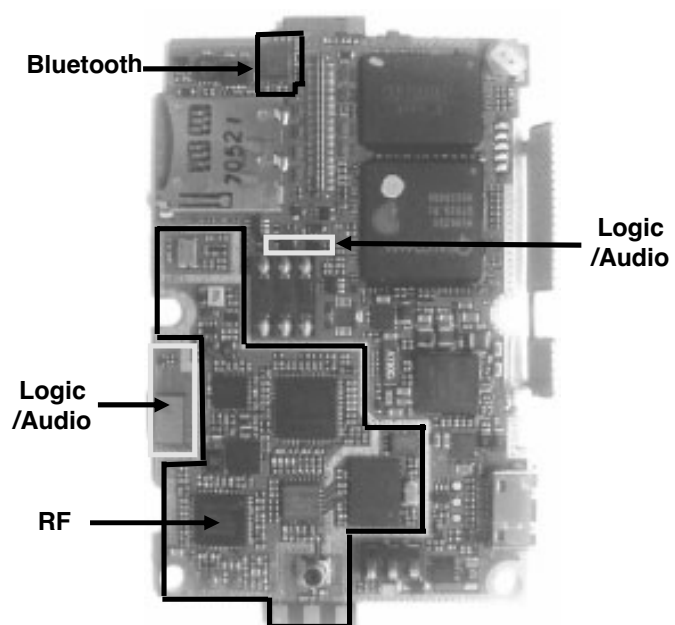
3.13 Main Features

1. LG-CU575 Main features

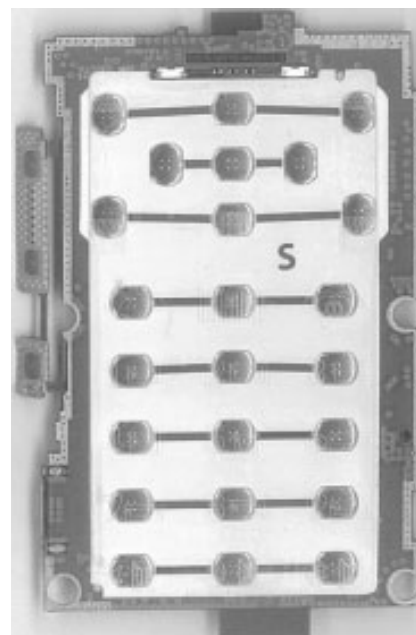
- Dual Clamshell Type
- WCDMA(850, 1900) + EDGE Quad(Class10)
- Color LCD(Main:65K TFT, 2.2', Sub:TFT, 1.3")
- SXGA(1.3M) Camera
- 18 x 13 speaker
- Stereo Headset
- Speaker phone(in GSM and WCDMA)
- 72 Poly Sound
- MP3/AAC decoder and play
- MPEG4 encoder/decoder and play/save
- JPEG en/decoder
- Supports Bluetooth, USB
- Micro SD card
- 970 mAh (Li-Ion)

3. TECHNICAL BRIEF

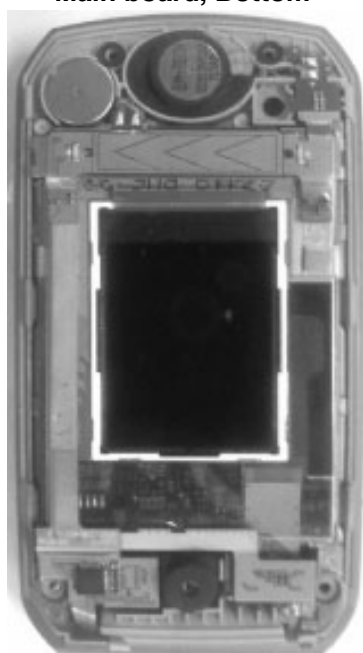
2. CU575 Main Component



Main board, Bottom

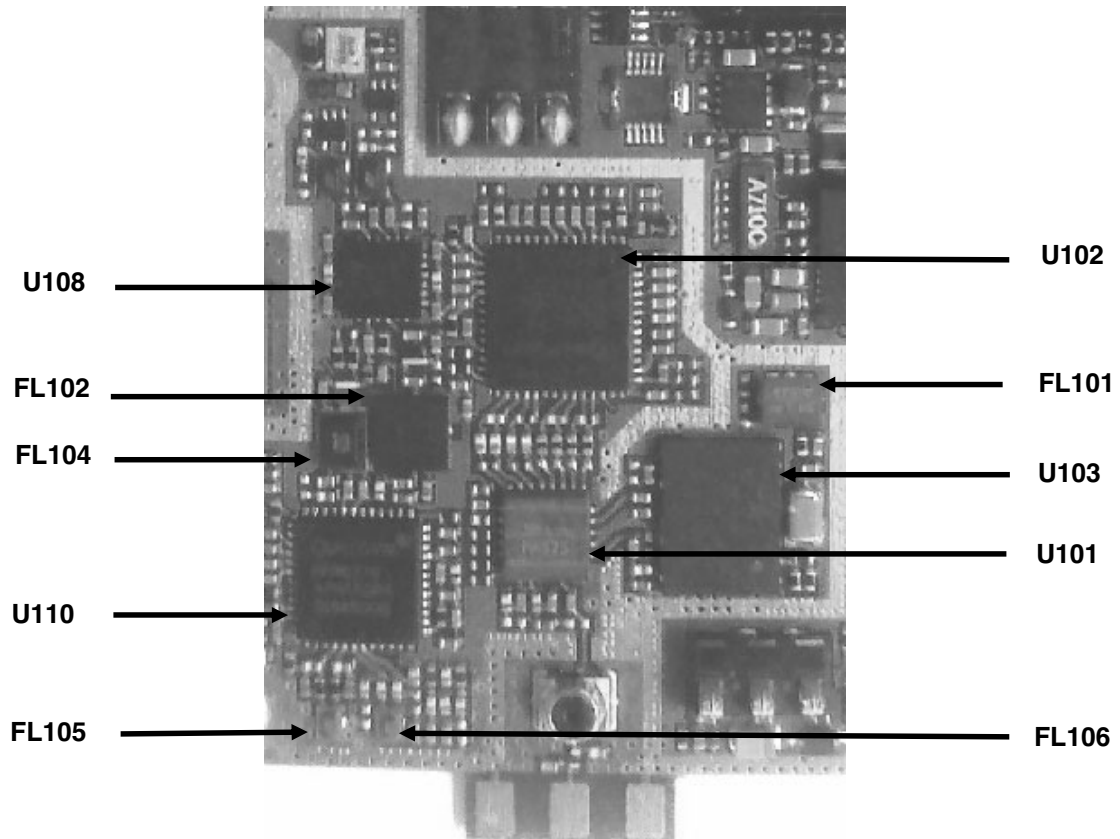


Main board, Top



LCD FPCB

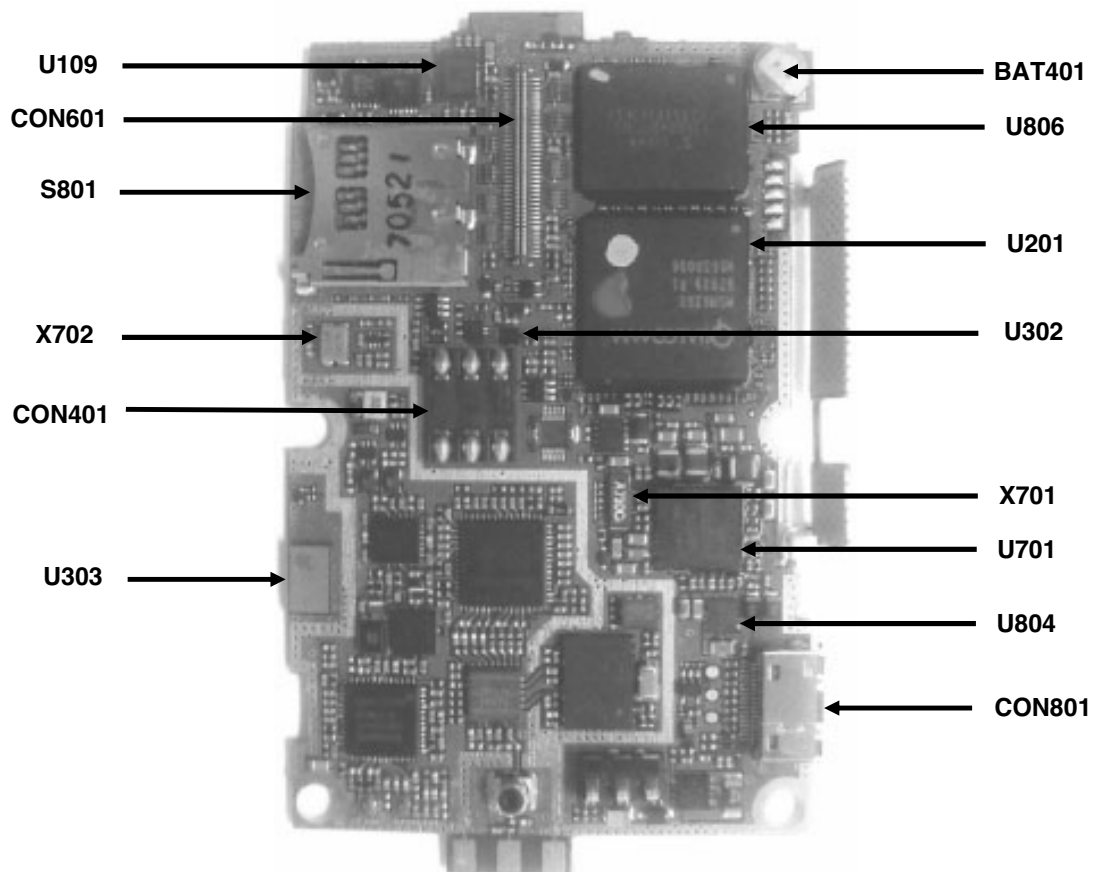
RF



| Reference | Description | Reference | Description |
|-----------|-------------|-----------|----------------|
| U101 | FEM | FL101 | GSM SAW |
| U102 | RTR6275 | FL102 | W1900 Duplexer |
| U103 | GSM PAM | FL104 | W850 Duplexer |
| U108 | WCDMA PAM | FL105 | W850 SAW |
| U110 | RFR6275 | FL106 | W1900 SAW |

3. TECHNICAL BRIEF

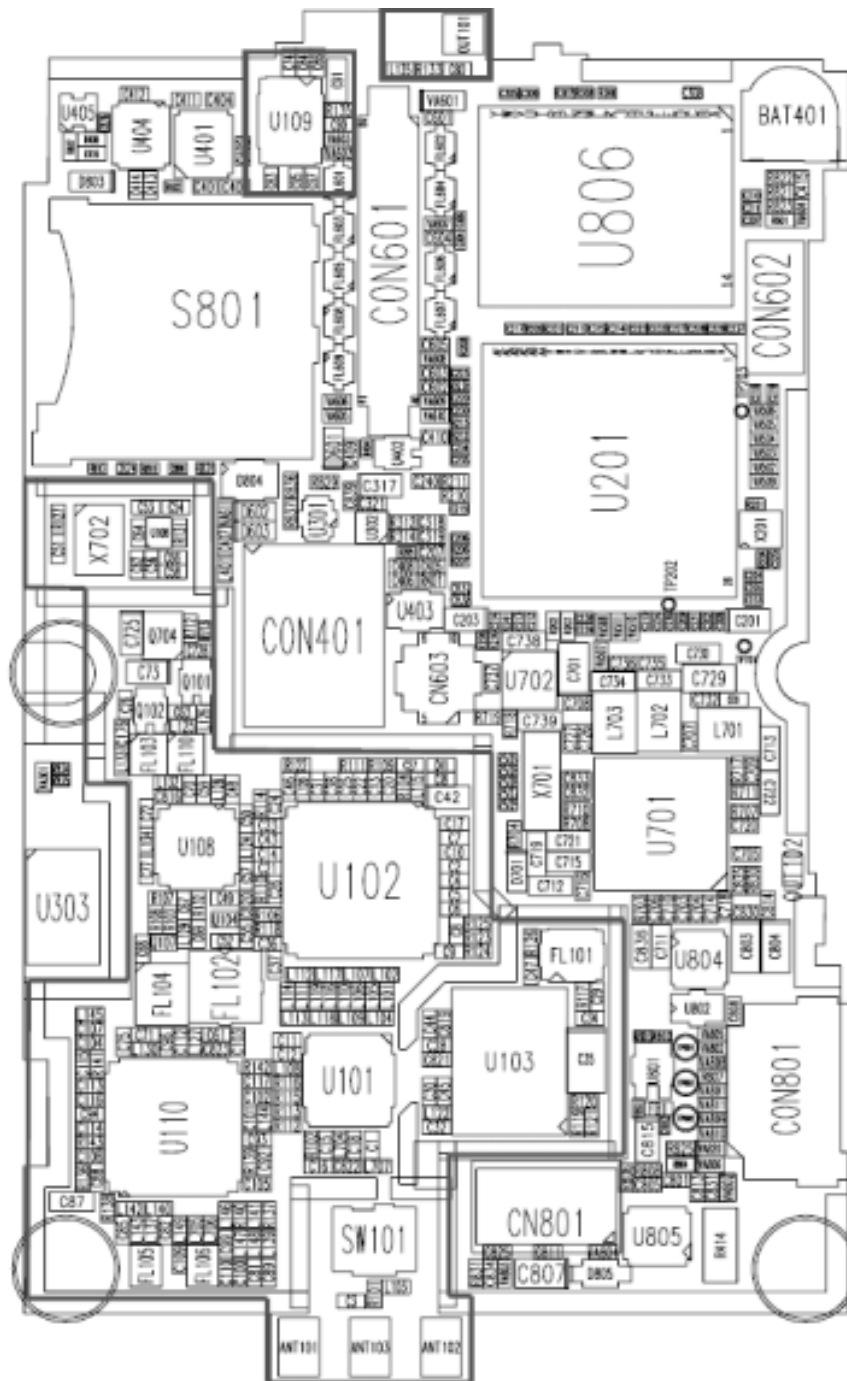
Audio/Logic/BT



| Reference | Description | Reference | Description |
|-----------|-------------|-----------|------------------|
| U109 | BT module | BAT401 | Back-up Battery |
| U201 | MSM6260 | S801 | Micro SD socket |
| U302 | Audio AMP | X701 | X-tal(32.768KHz) |
| U303 | MIC | X702 | TCXO |
| U701 | PMIC | CON801 | MMI connector |
| U804 | OVP IC | CON401 | USIM connector |
| U806 | Memory | CON601 | FPCB connector |

4. TROUBLE SHOOTING

4.1 RF Component

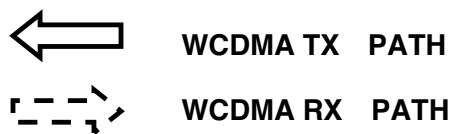
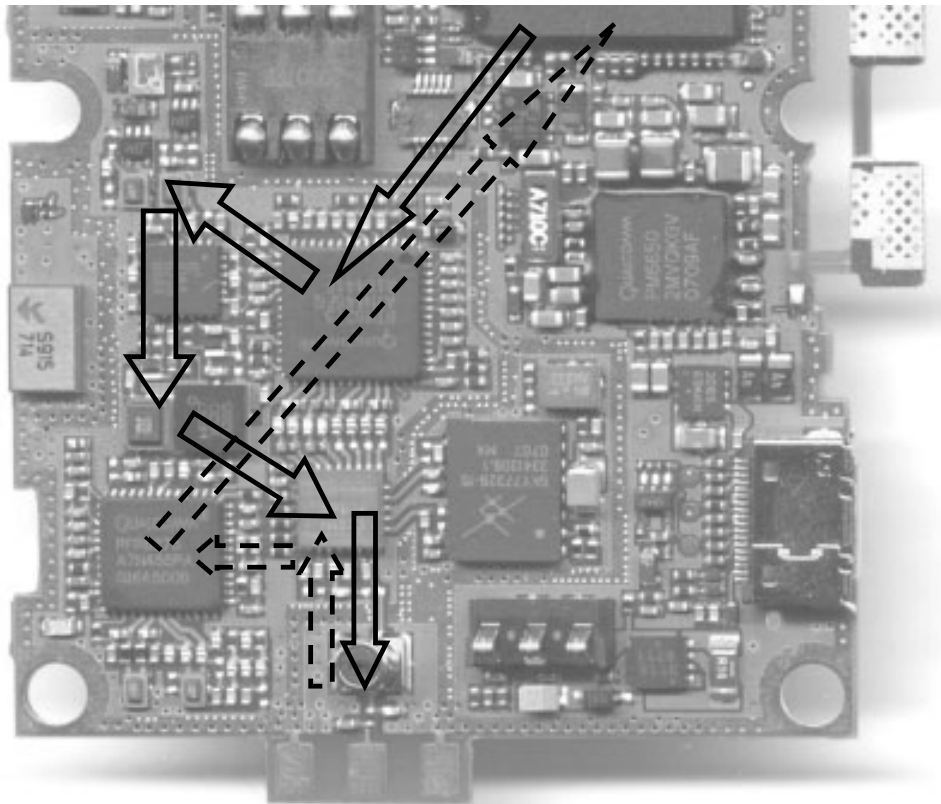


Bottom Side

4. TROUBLE SHOOTING

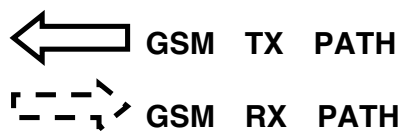
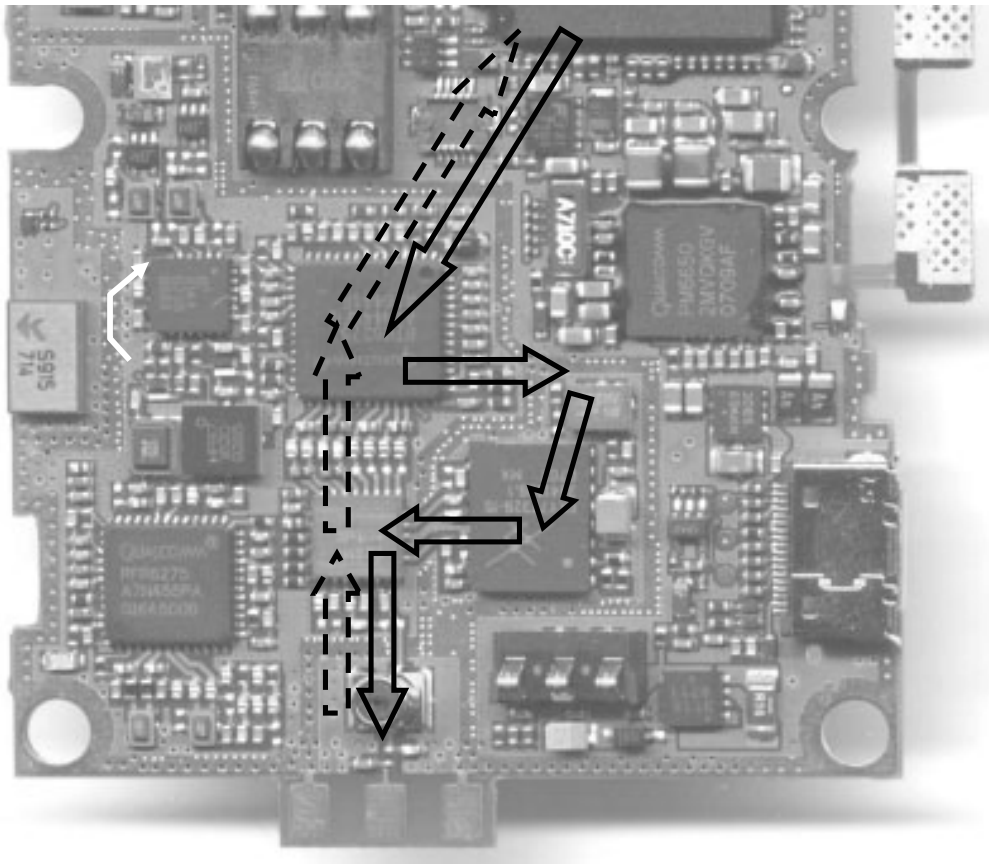
| Block Diagram Block | Ref. Name | Part Name | Function | Comment |
|---------------------|-----------|--------------------|--------------------------|-------------------|
| Common | U201 | MSM6260 | Main Control | Main Chipset |
| | X701 | FC-255(9PF,±20PPM) | Sleep Clock | 32.768 kHz |
| | X201 | ICRT20S48M0X514CR | USB Clock | 48MHz |
| | U701 | PM6650-2M | Power Control | Power Supply |
| | U302 | TPA2010D1YZF | Audio AMP | AMP |
| | U101 | LMSP4LMA-573TEMP | Switch | Band select |
| | U806 | TY9000A800JOGG | Memory | 1G /512M |
| | SW101 | KMS-512 | Test Connector | Calibration, etc |
| | X702 | DSA321SCE-19.2M | VCTCXO | 19.2MHz |
| Bluetooth | U109 | RB04 | Bluetooth RF Transceiver | Bluetooth TRX |
| | OUT101 | PAD | Antenna PAD | Bluetooth antenna |
| UMTS | U110 | RFR6275 | UMTS Receiver IC | RX |
| | U102 | RTR6275 | UMTS/GSM Transceiver | TRX |
| | FL106 | B7847 | UMTS1900 RX SAW filter | RX |
| | FL105 | B7838 | UMTS850 RX SAW filter | RX |
| | FL104 | B7637 | UMTS 850 Duplexer | TRX |
| | FL102 | ACMD-7402 | UMTS 1900 Duplexer | TRX |
| | U108 | RF5144 | UMTS dual PA | TX |
| | U702 | FB6831J | DC/DC converter | D/D Converter |
| | Q704 | SI8407DB-T2-E1 | DC/DC Switching MOSFET | FET |
| | FL110 | B9014 | UMTS 1900 TX SAW Filter | TX |
| | FL103 | B9003 | UMTS 850 TX SAW Filter | TX |
| GSM | U103 | SKY77329 | TX Dual EDGE PAM | TX |
| | FL101 | LMSM32AA-533 | GSM850/900 TX SAW Filter | TX |

4.1.1 SIGNAL PATH_UMTS RF



4. TROUBLE SHOOTING

4.1.2 SIGNAL PATH_GSM RF

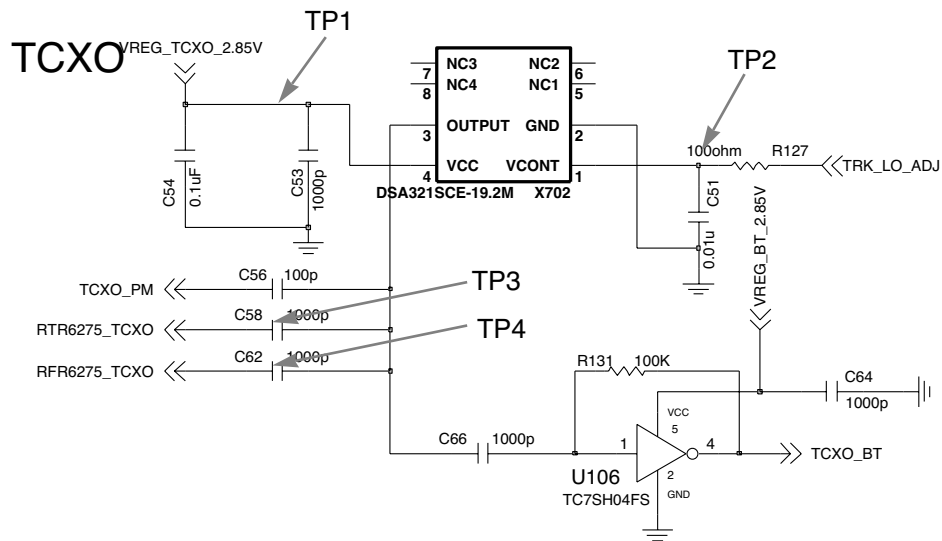


4.2 Checking VCXO Block

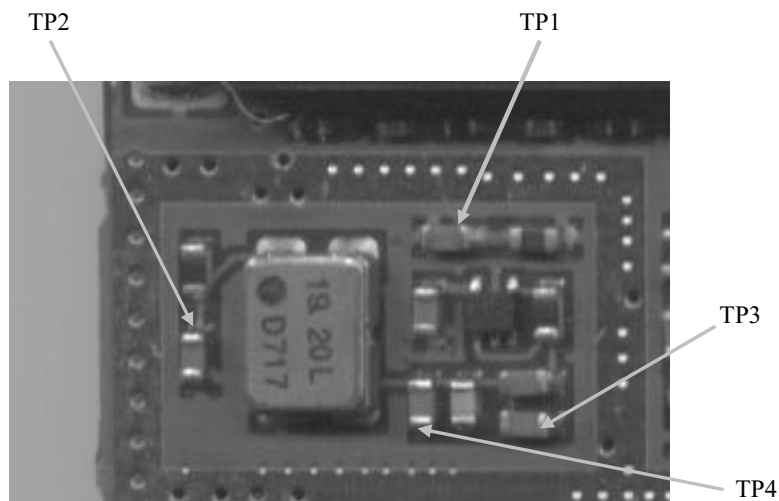
The reference frequency (19.2MHz) from X702 (VCTCXO) is used in UMTS TX part, GSM part and BB part.

Check 1. Crystal part

If you already check this crystal part, you can skip check 1.

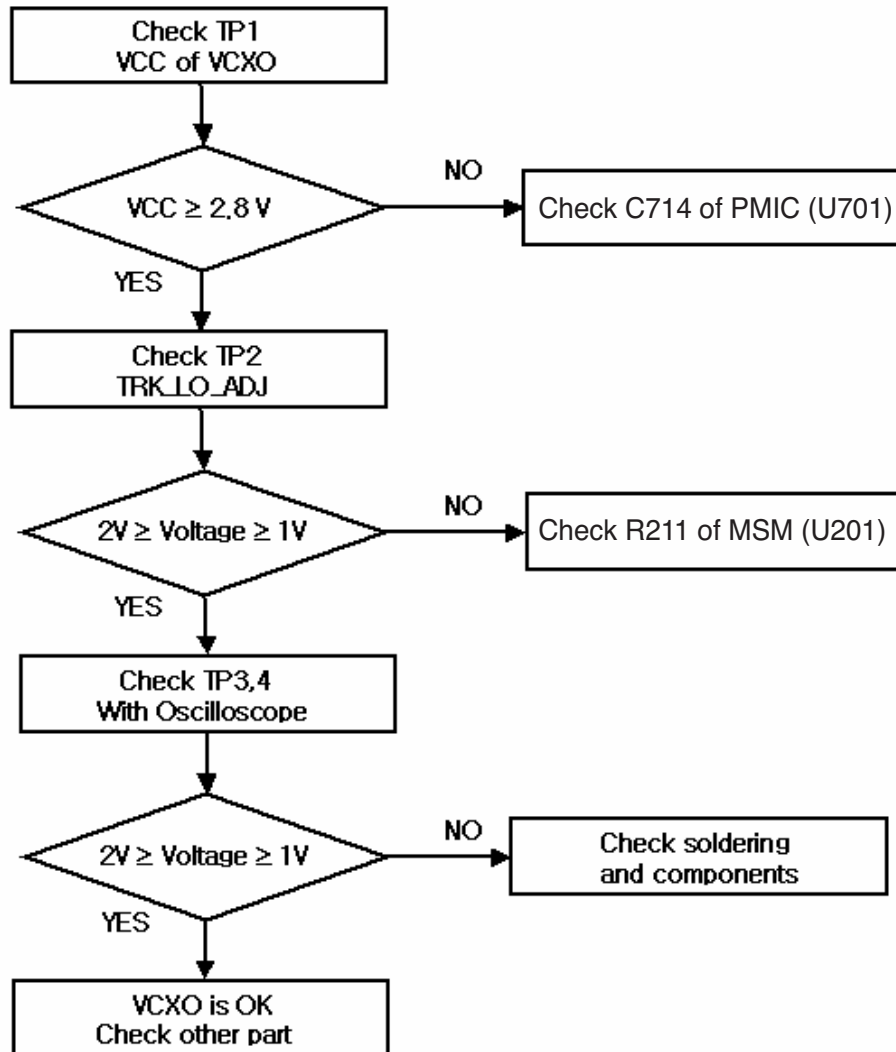


Schematic of the Crystal Part

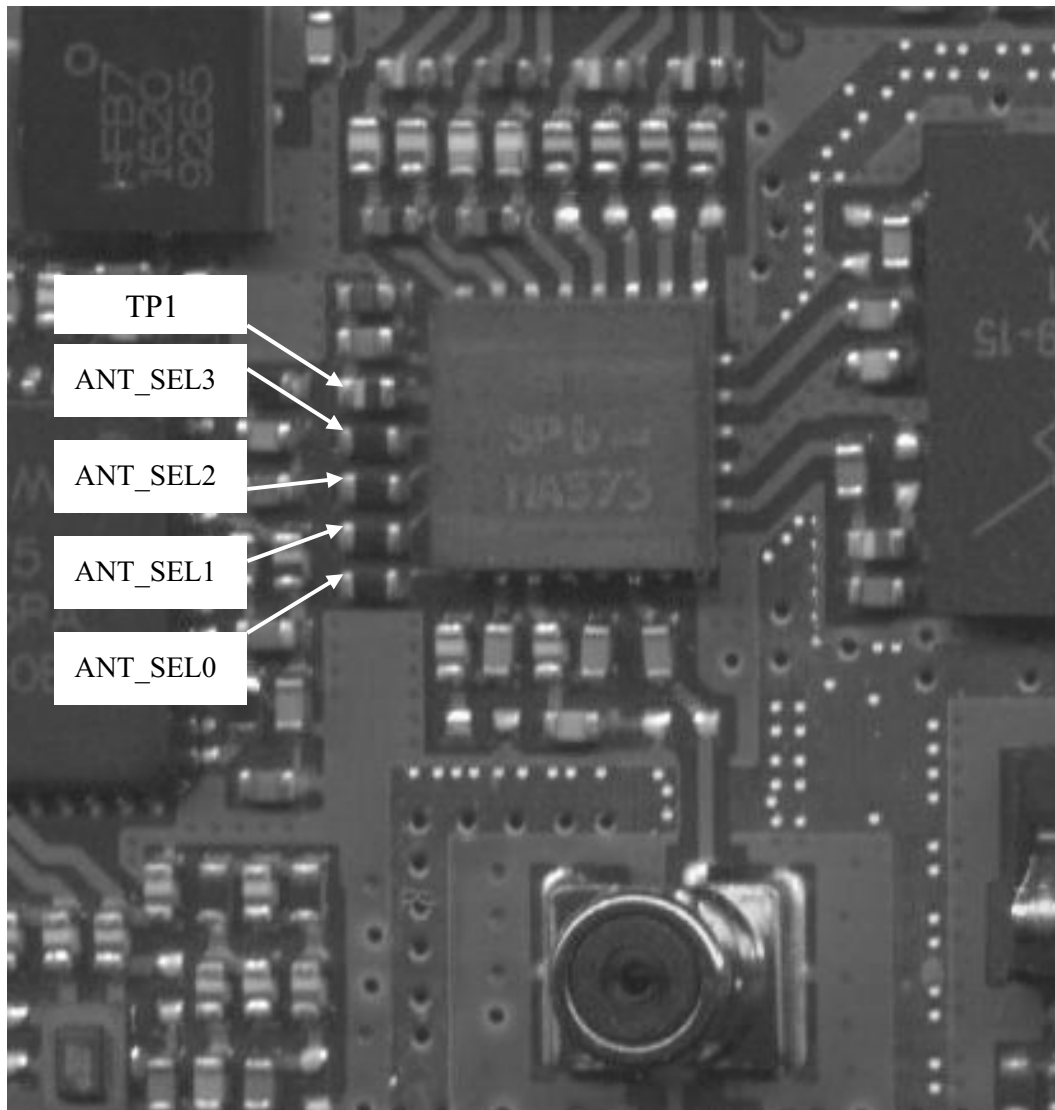


Test Point (Crystal Part)

4. TROUBLE SHOOTING

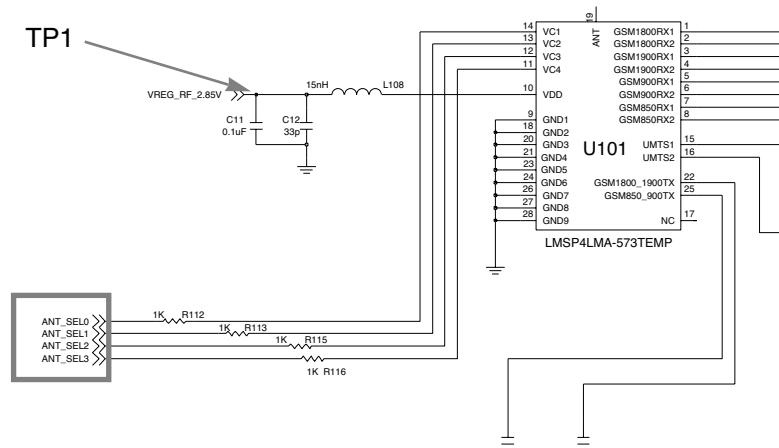


4.3 Checking Ant. SW Module Block



Antenna Switch Block(Bottom)

4. TROUBLE SHOOTING



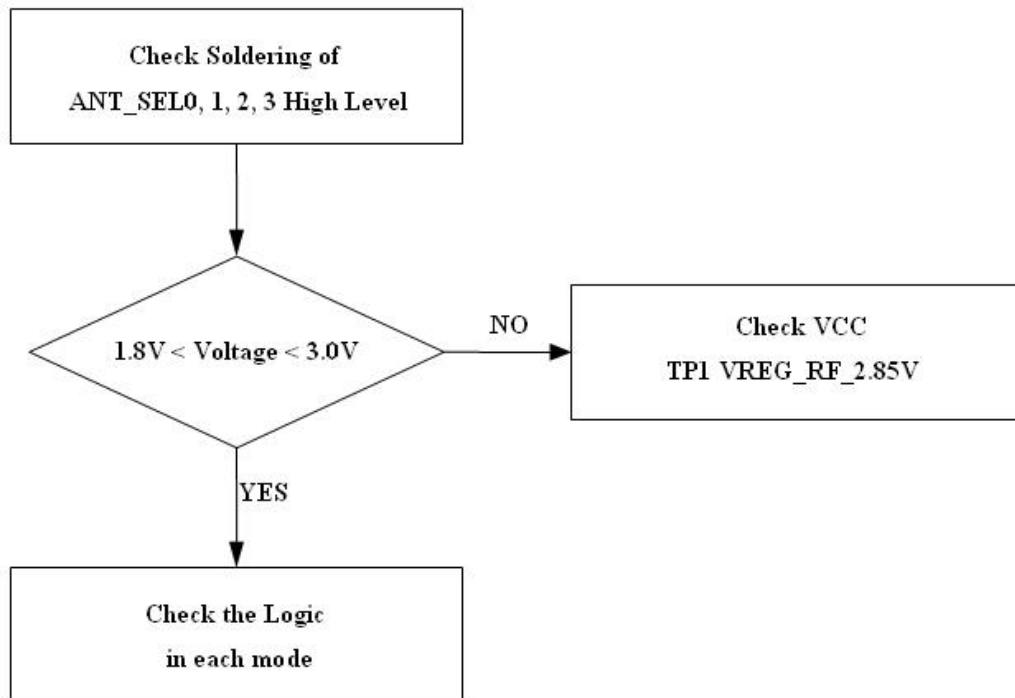
Schematic of the Antenna Switch Block

CONTROL LOGIC

| Mode | Vc1 | Vc2 | Vc3 | Vc4 | Vdd |
|--------------------|----------|----------|----------|----------|----------|
| GSM850/900 Tx | 1.8-3.0V | 1.8-3.0V | 0-0.2V | 0-0.2V | 2.4-3.0V |
| GSM1800/GSM1900 Tx | 1.8-3.0V | 0-0.2V | 0-0.2V | 0-0.2V | 2.4-3.0V |
| GSM850 Rx | 0-0.2V | 0-0.2V | 0-0.2V | 0-0.2V | 2.4-3.0V |
| GSM900 Rx | 0-0.2V | 0-0.2V | 1.8-3.0V | 0-0.2V | 2.4-3.0V |
| GSM1800 Rx | 0-0.2V | 1.8-3.0V | 1.8-3.0V | 0-0.2V | 2.4-3.0V |
| GSM1900 Rx | 0-0.2V | 1.8-3.0V | 0-0.2V | 0-0.2V | 2.4-3.0V |
| UMTS1 | 1.8-3.0V | 0-0.2V | 1.8-3.0V | 0-0.2V | 2.4-3.0V |
| UMTS2 | 1.8-3.0V | 0-0.2V | 1.8-3.0V | 1.8-3.0V | 2.4-3.0V |
| Idle | 0-0.2V | 0-0.2V | 0-0.2V | 0-0.2V | 0-0.2V |

Logic Table of the Antenna Switch

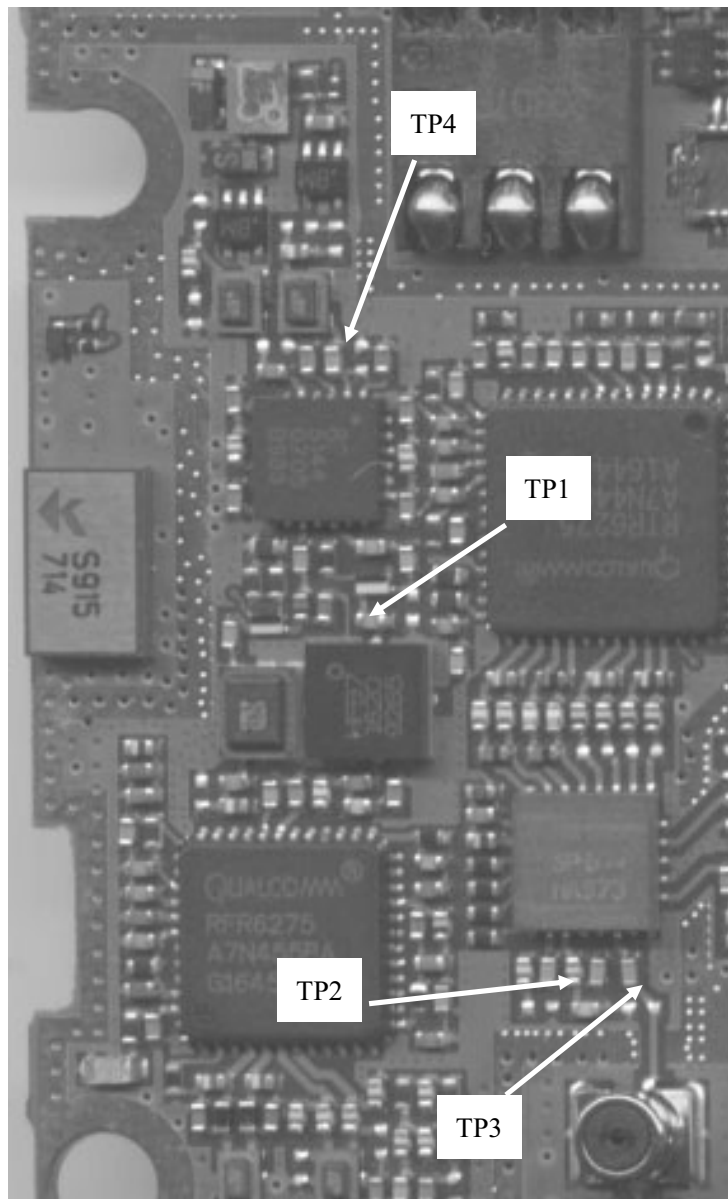
Checking Switch Block power source



4. TROUBLE SHOOTING

4.4 Checking UMTS Block

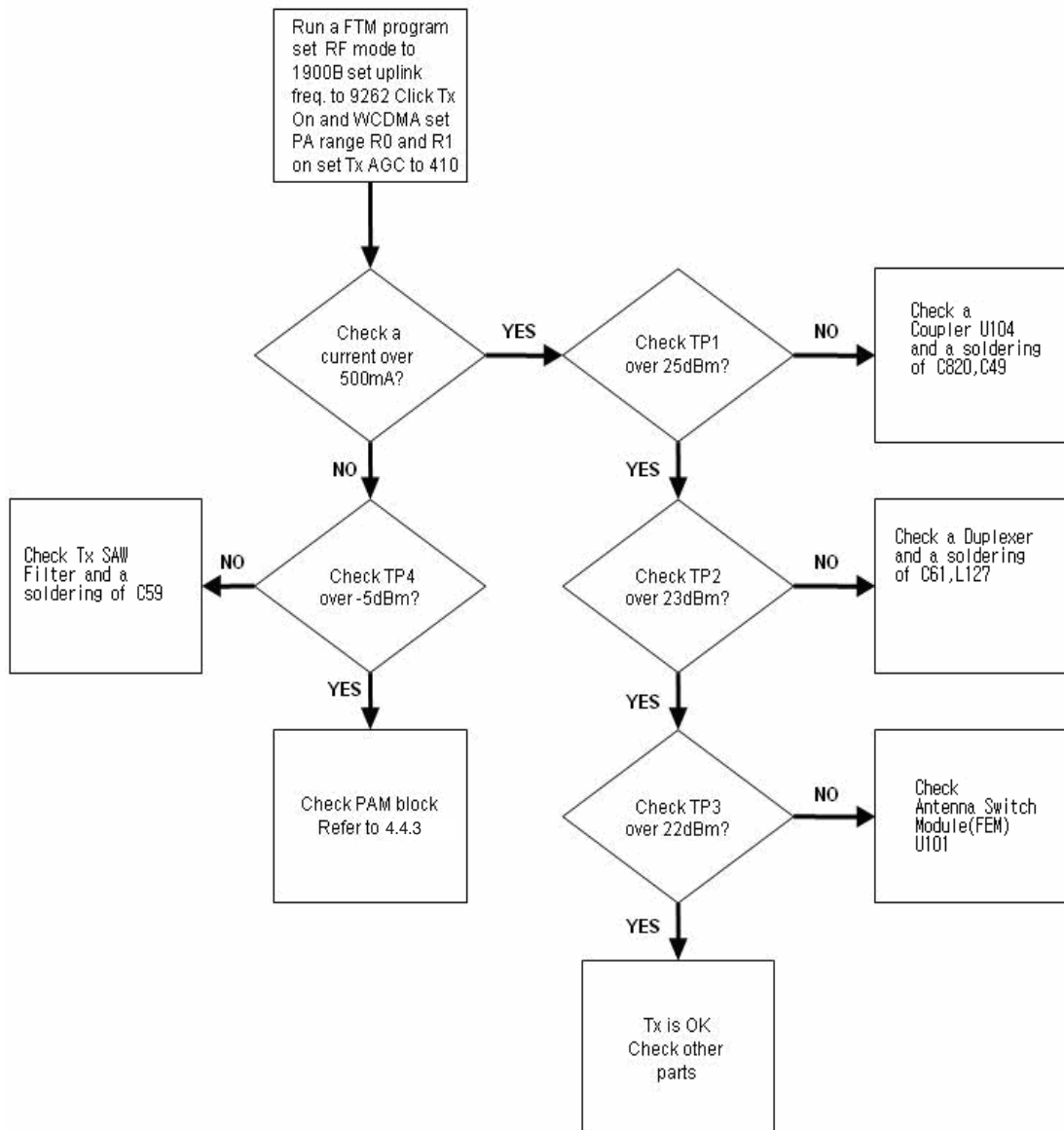
4.4.1 Checking TX POWER of UMTS1900MHz



Test Point (RF TX POWER of UMTS1900)

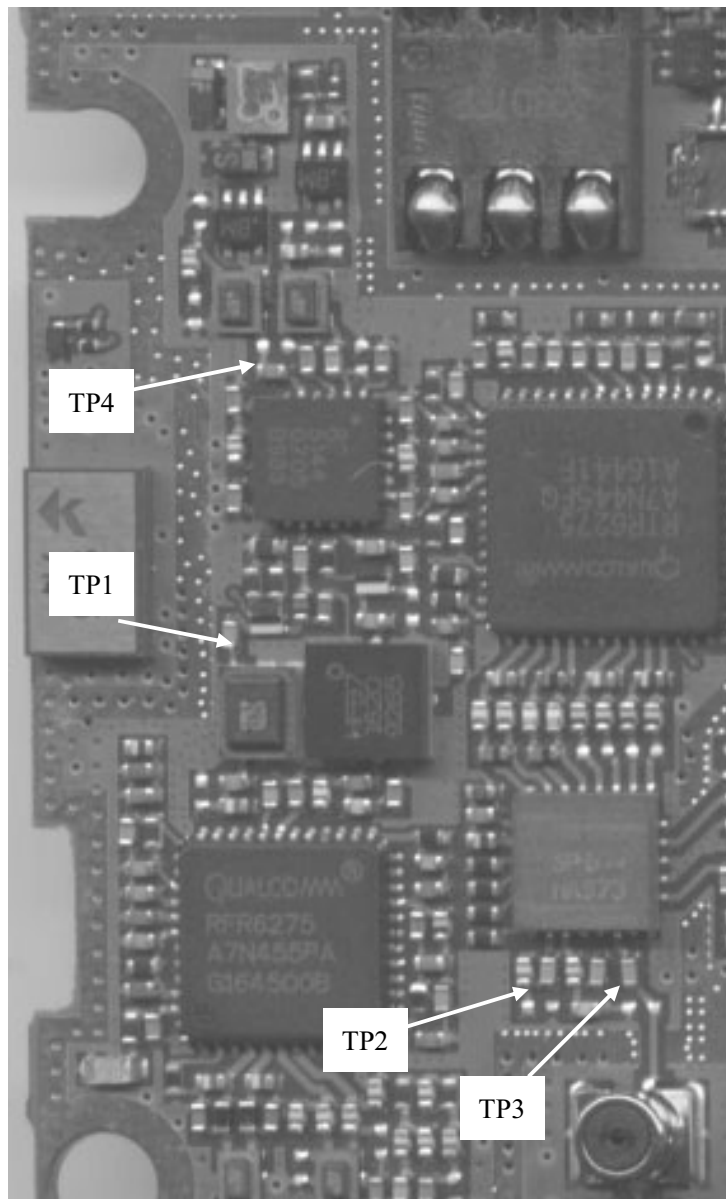
4. TROUBLE SHOOTING

For testing, Max power of UMTS1900MHz is needed.



4. TROUBLE SHOOTING

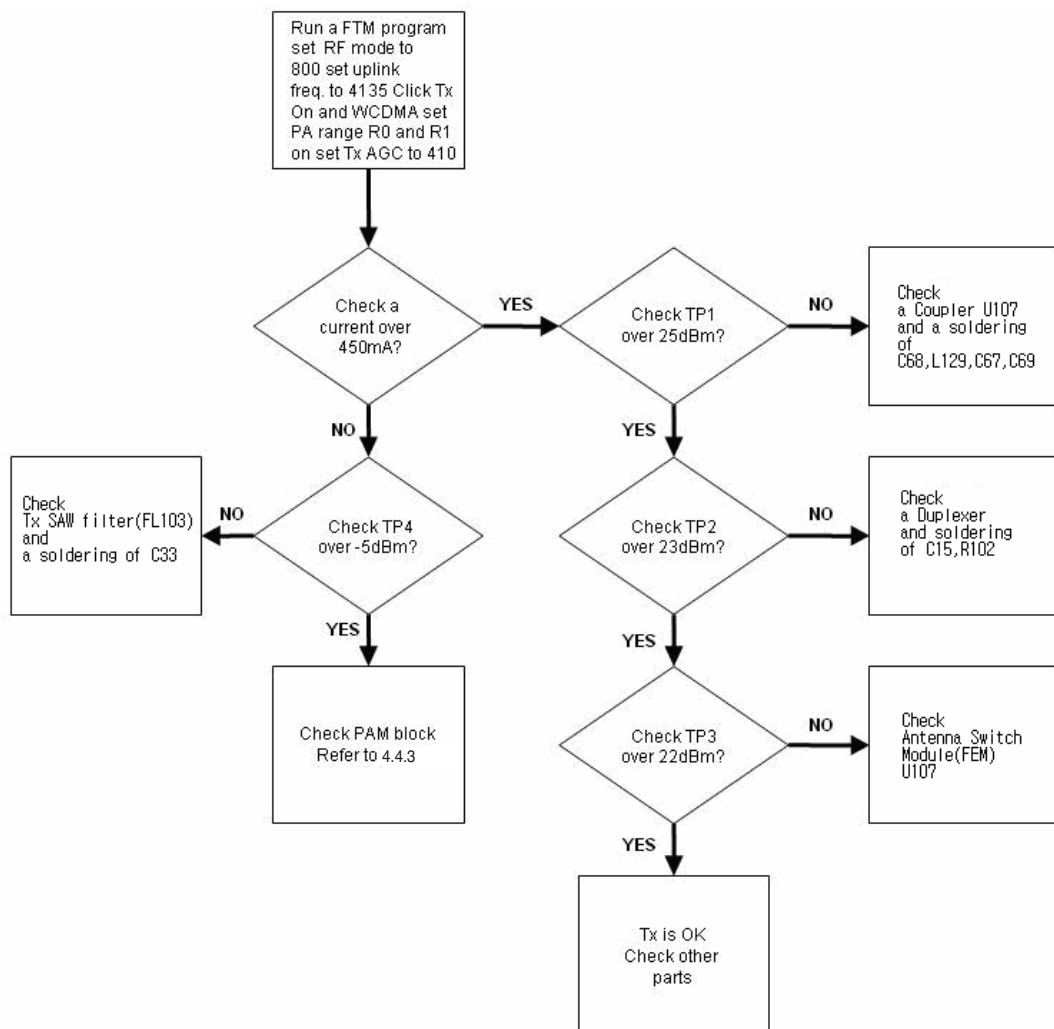
4.4.2 Checking TX POWER of UMTS 850MHz



Test Point of RF TX POWER of UMTS 850

4. TROUBLE SHOOTING

For testing, Max power of UMT850MHz is needed.

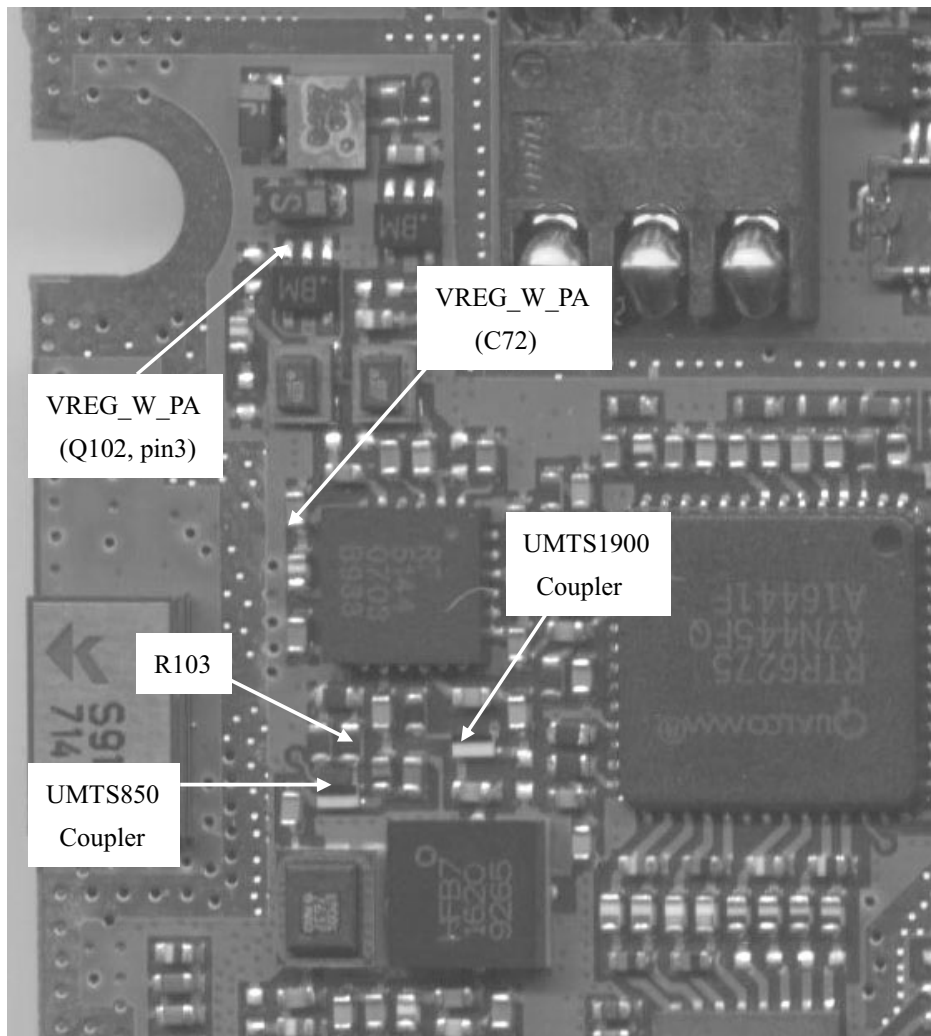


4. TROUBLE SHOOTING

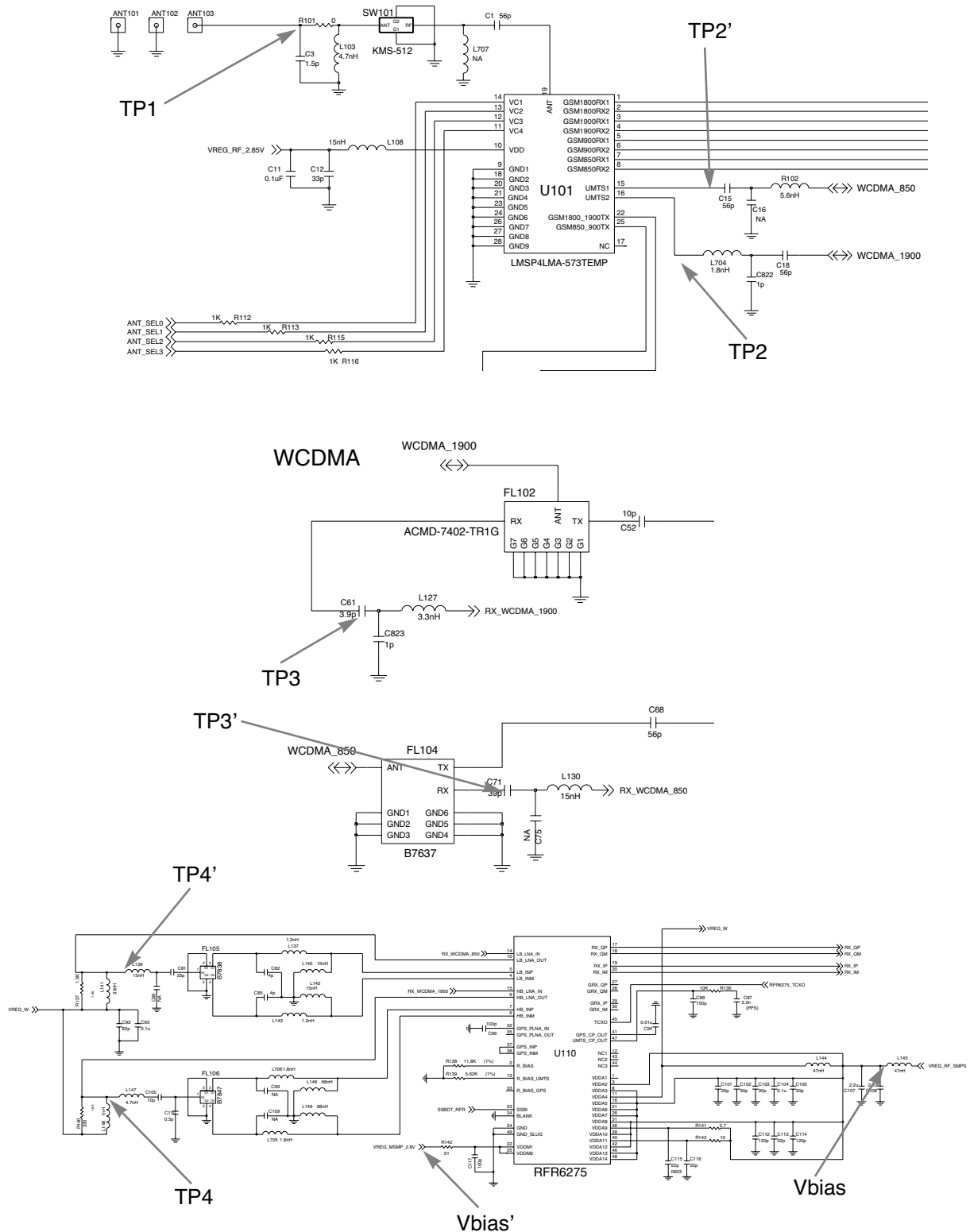
4.4.3 Checking UMTS PAM Control Block

• PAM control signal

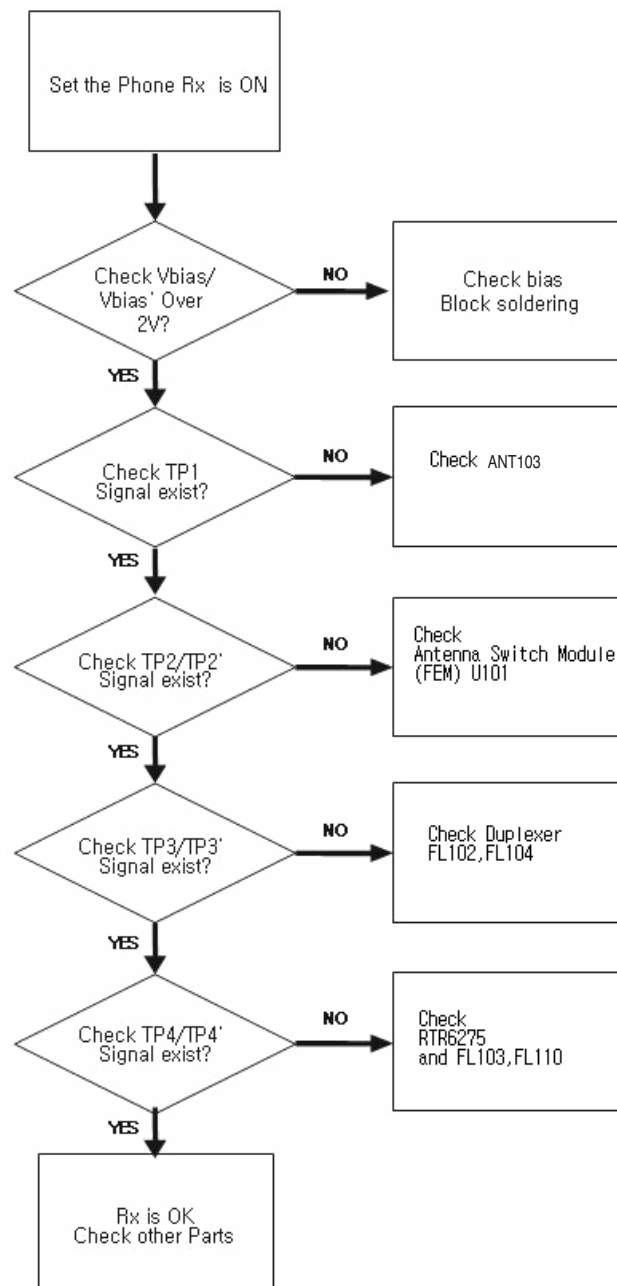
1. PWR_DET : UMTS Tx Power Detected value (Check R103)
2. TX_AGC_ADJ : UMTS RTR6275 Tx Amp Gain Control
3. VREG_RF_2.85V : UMTS PAM enable (about 2.85V)
4. VREG_W_PA : UMTS PAM Main Voltage ($3V < VREG_W_PA < 4.2V$)



4.4.4 Checking RF Rx Level



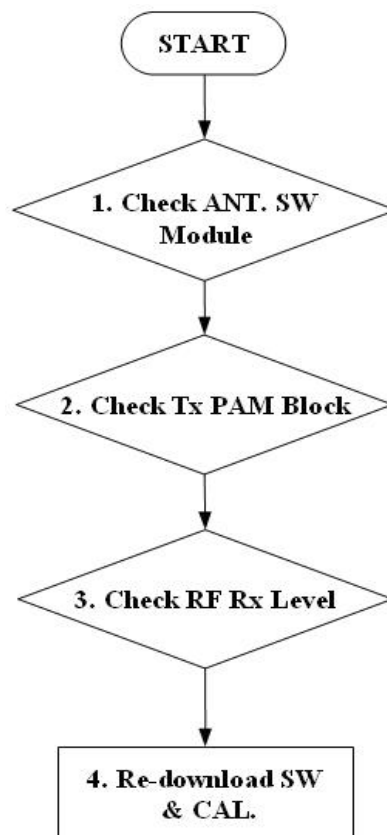
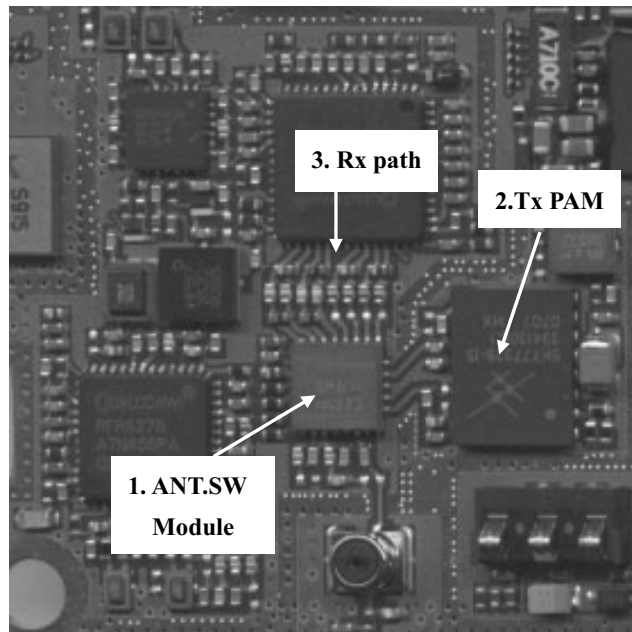
4. TROUBLE SHOOTING



★ TP*: UMTS 850 RX PATH

TP*: UMTS 1900 RX PATH

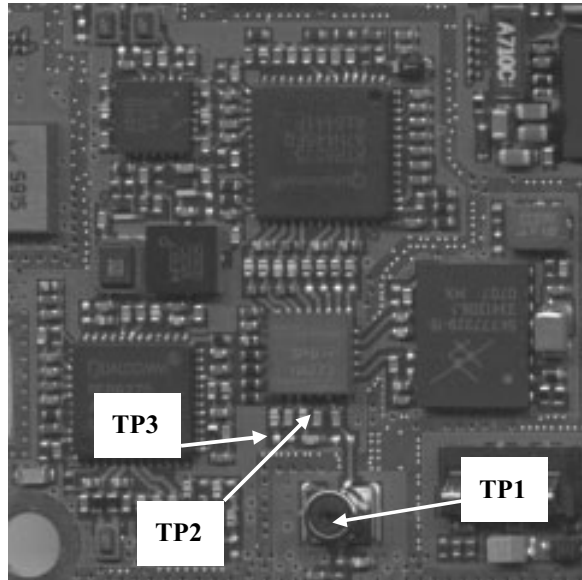
4.5 Checking GSM Block



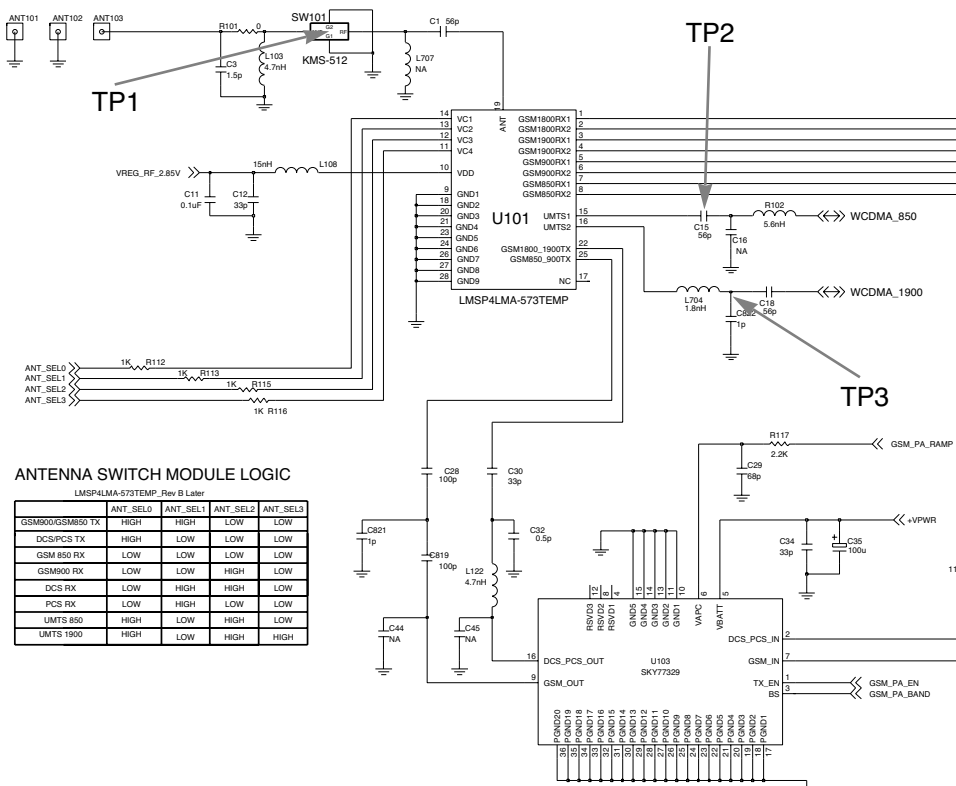
4. TROUBLE SHOOTING

4.5.1 Checking Ant. SW Module

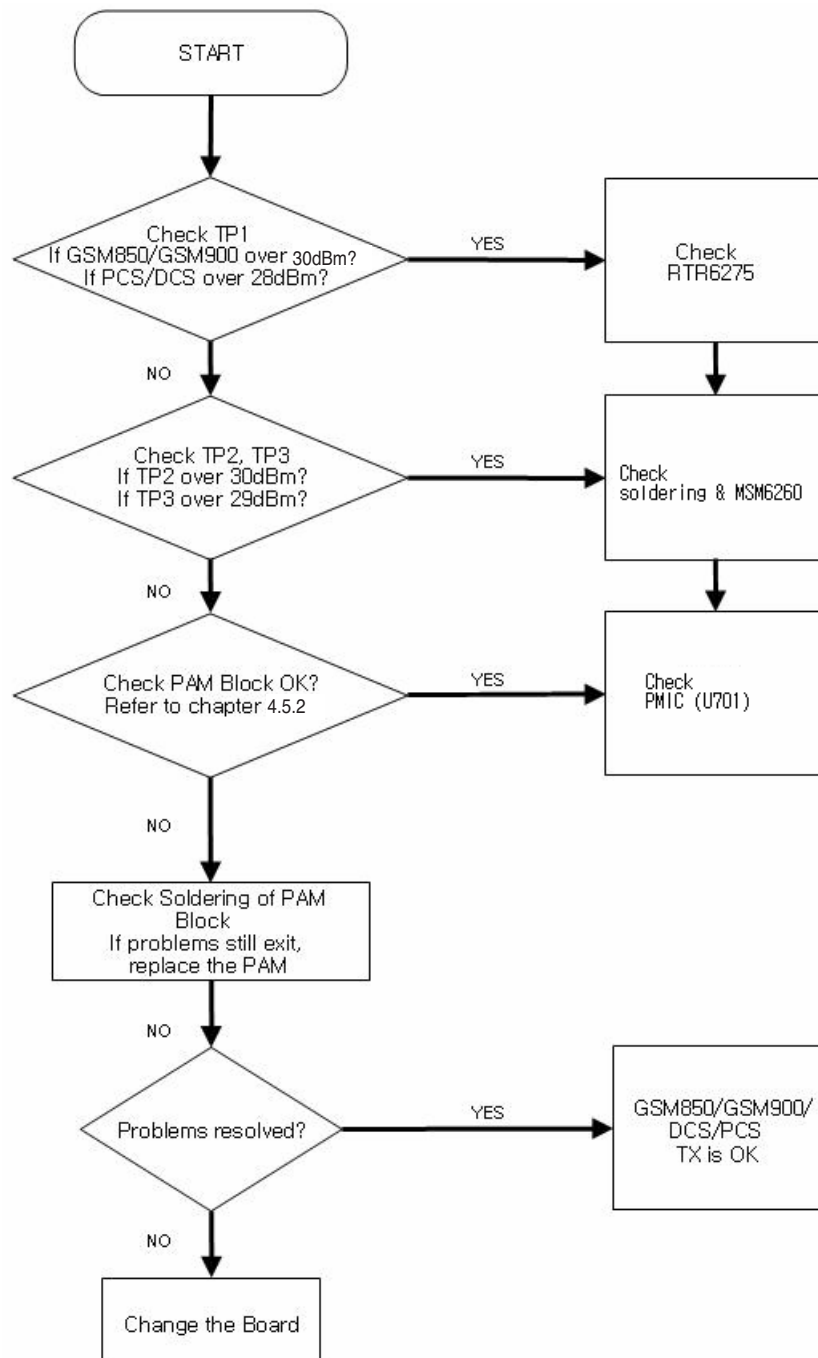
Refer to chapter 3.3



Schematic of RF Tx level



Checking RF Tx level



4. TROUBLE SHOOTING

4.5.2 Checking PAM Block

TP1. GSM_PA_RAMP : Power Amp Gain Control. typically, $0.5V < V_{apc} < 1.6V$,

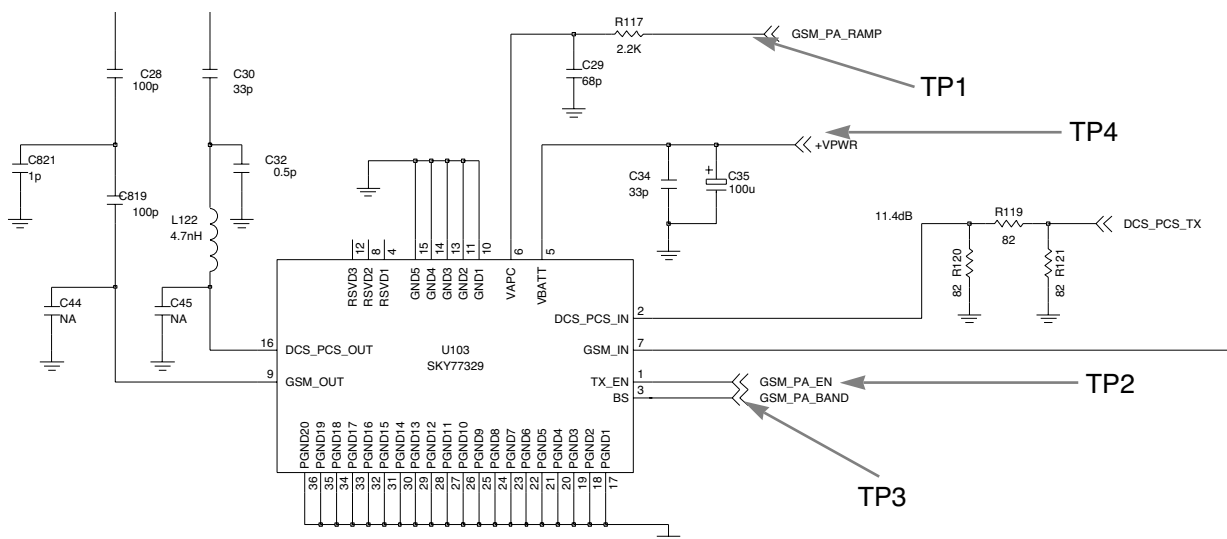
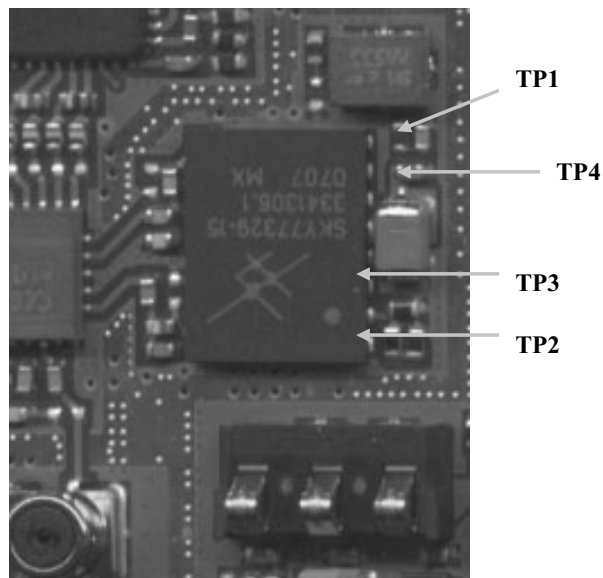
TP2. GSM_PA_EN : Power Amp Enable

(Power ON : higher than 2.5V , Power OFF : lower than 0.7V)

TP3. GSM_PA_BAND : Power Amp Band Selection Control

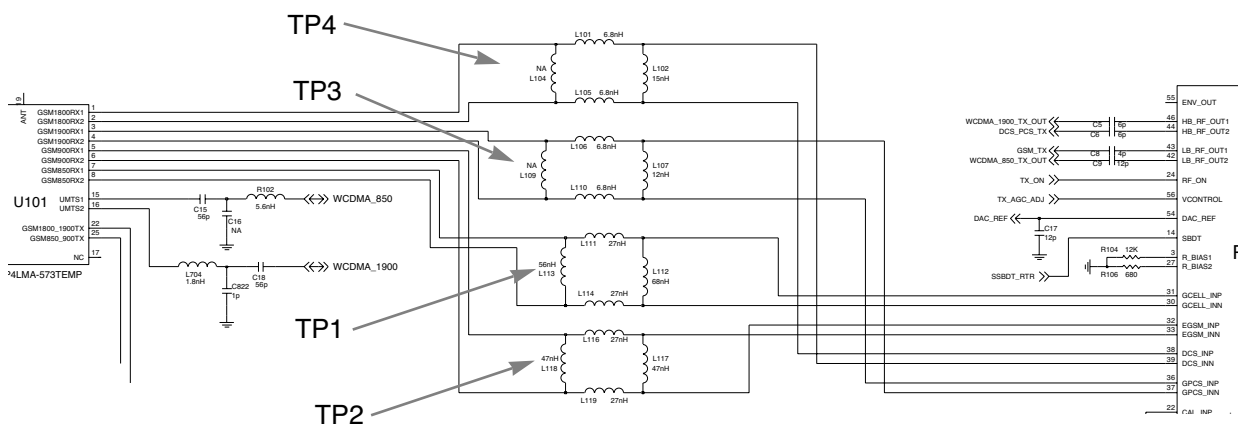
(GSM Mode : lower than 0.7V , DCS/PCS Mode : higher than 2.5V)

TP4. +VPWR : PAM Supply Voltage Vcc higher than 3.5V



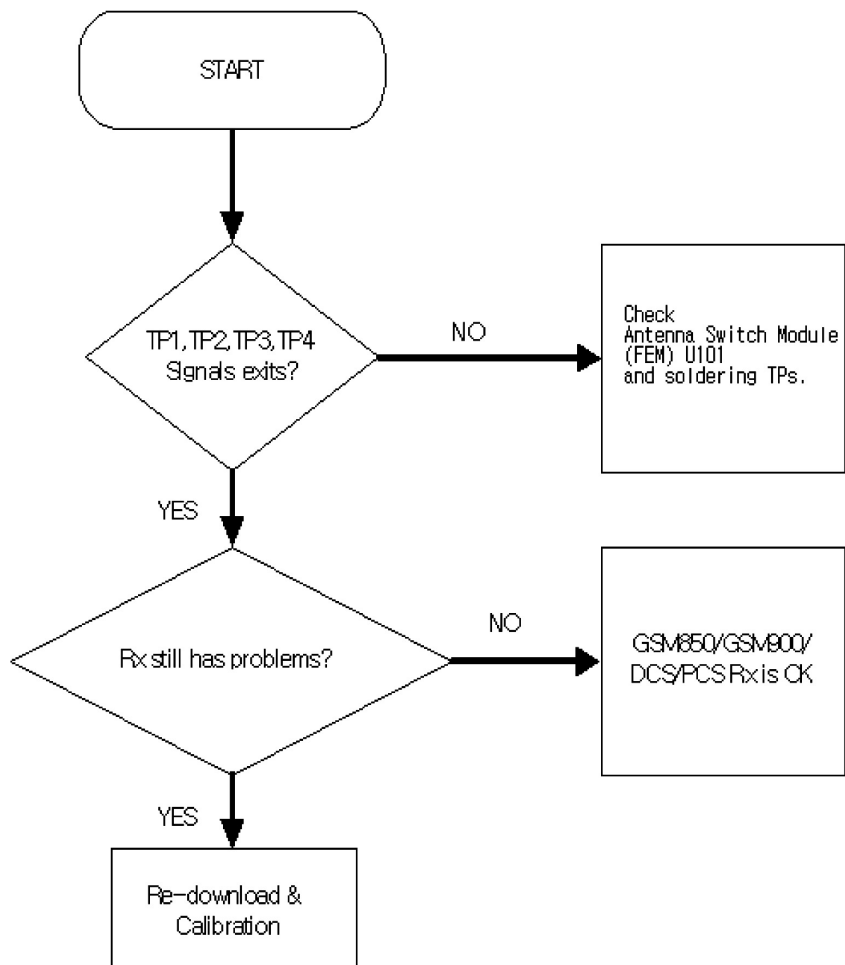
Schematic of GSM PAM Block

TP4. DCS Rx Input



Schematic of GSM850/GSM900/DCS/PCS Rx Block

4. TROUBLE SHOOTING

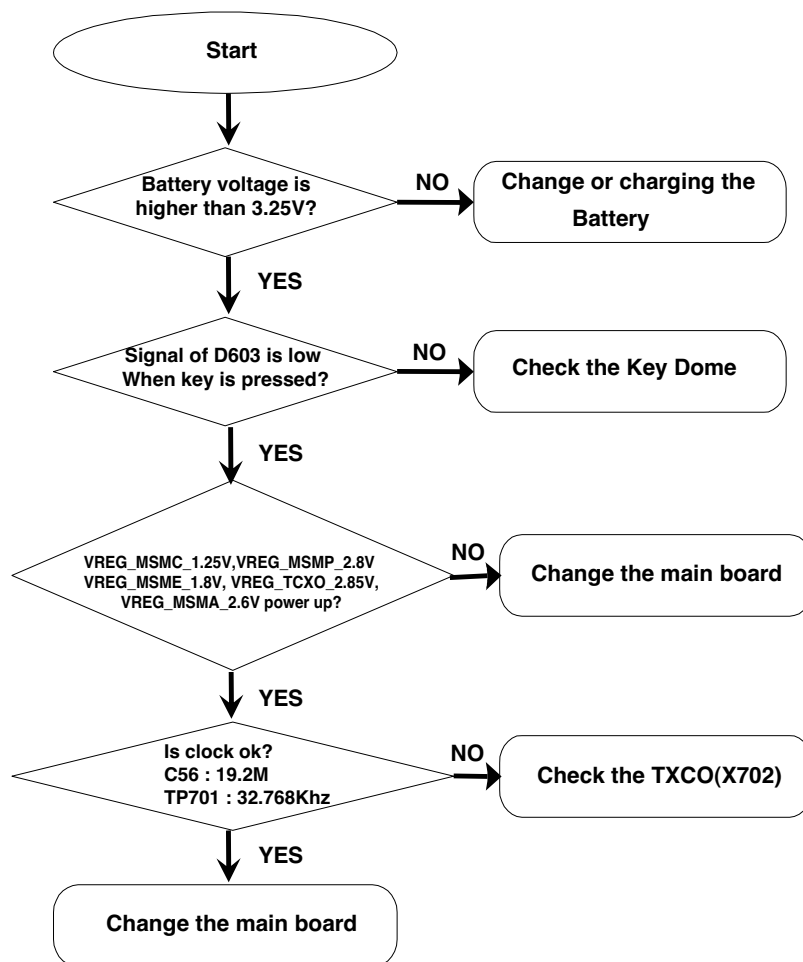


4. BB Trouble Shooting

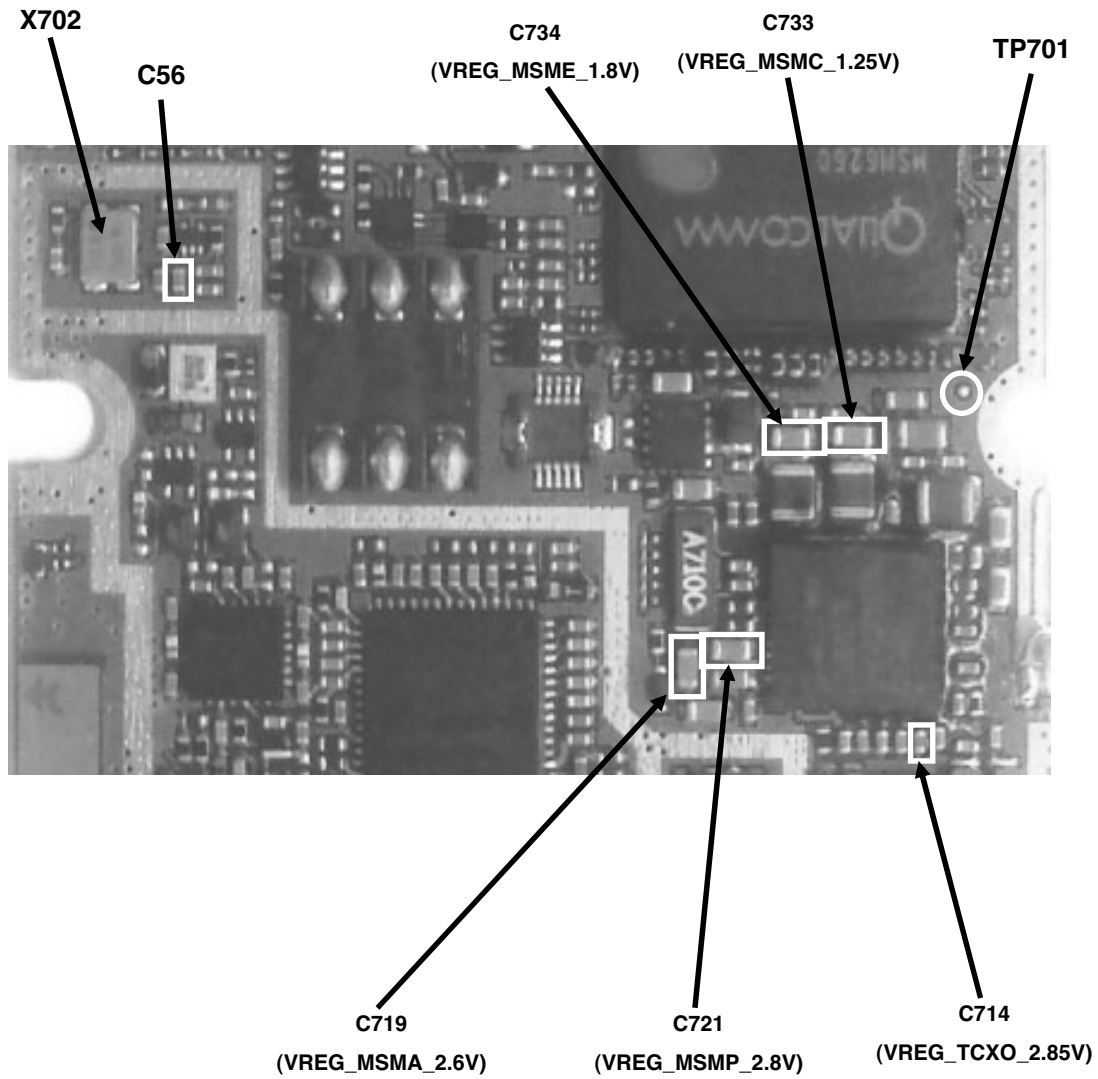
4.6 Power ON Troubleshooting

Power On sequence of CU575 is :

PWR key press(Key PCB) → PM_ON_SW_N go to low(D603), PM6650 KPDPWR_N pin(24) → PM6650 Power Up → VREG_MSMC_1.25V(C733), VREG_MSME_1.8V(C734), VREG_MSMP_2.8V(C721), VREG_MSMA_2.6V(C719), VREG_TCXO_2.85V(C714) power up and system reset assert to MSM → Phone booting and PS_HOLD(D701) assert to PMIC

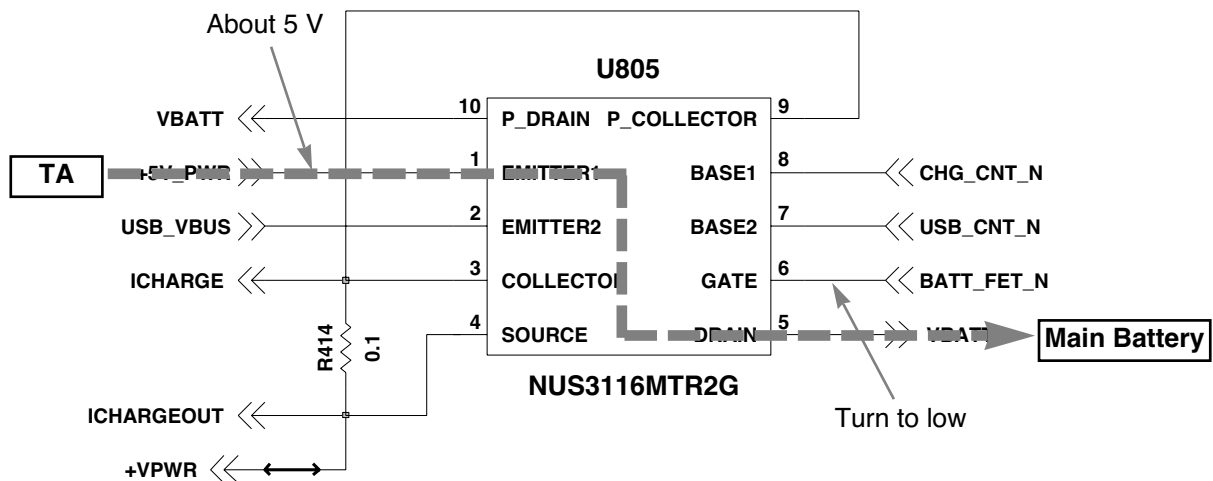


4. TROUBLE SHOOTING



4.7 Charger Troubleshooting (TA Charging)

Battery Charging Circuit



Charging Procedure

- Connect TA
- Control the charging current by PM6650 IC
- Charging current flows into the battery

Check Point

- Connection of TA
- Charging current path
- Battery

Troubleshooting Setup

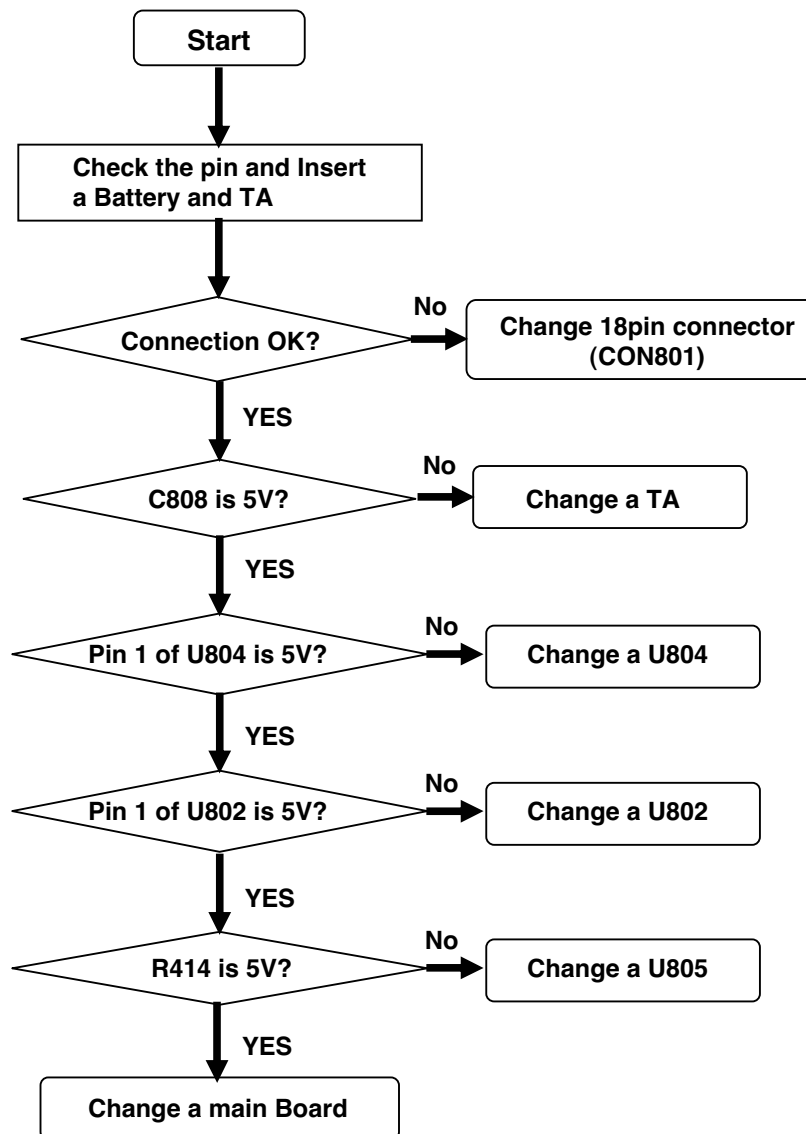
- Connect TA and battery to the phone

Troubleshooting Procedure

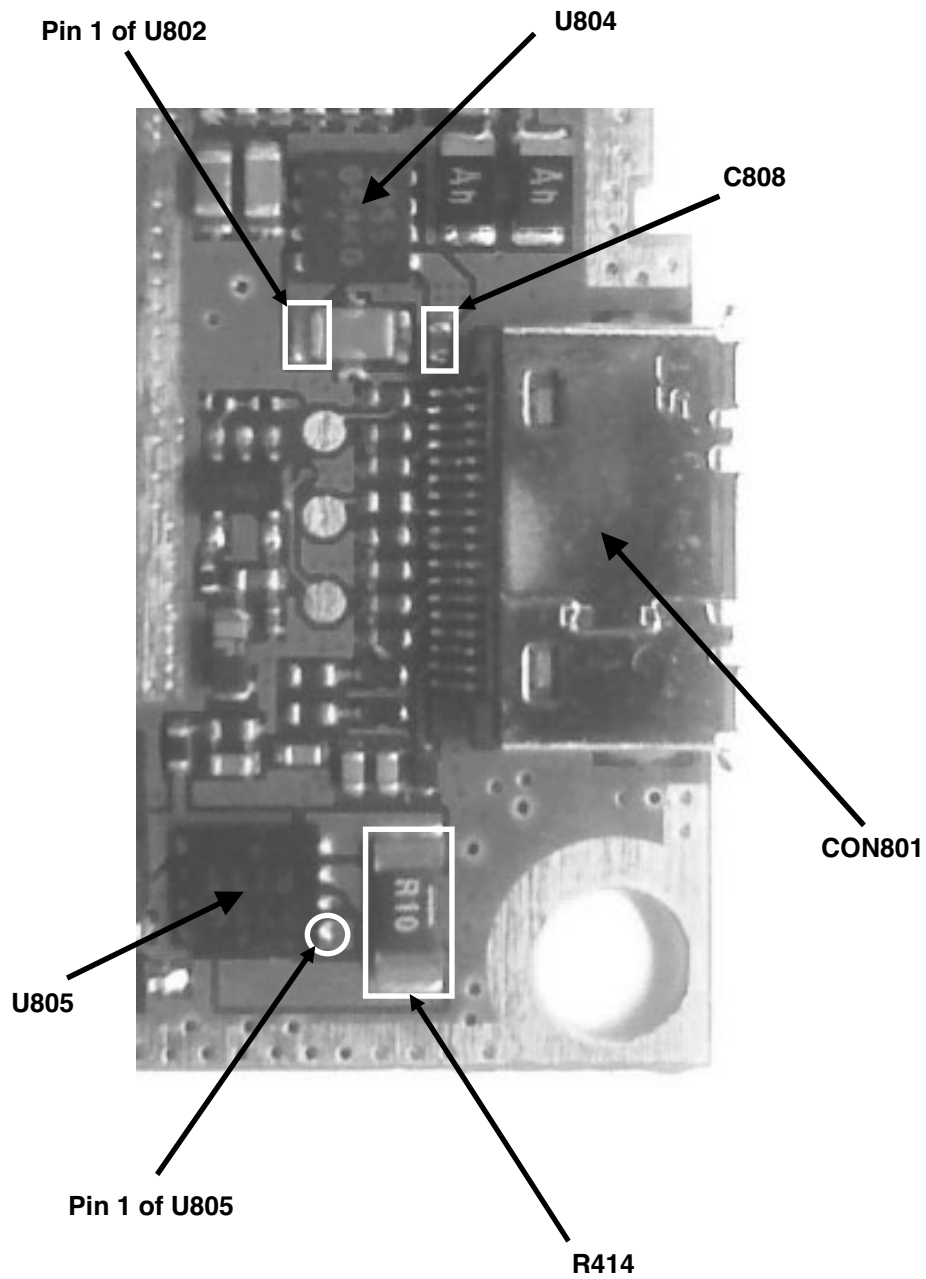
- Check the charger connector
- Check the charging current Path
- Check the battery

4. TROUBLE SHOOTING

Troubleshooting Flow



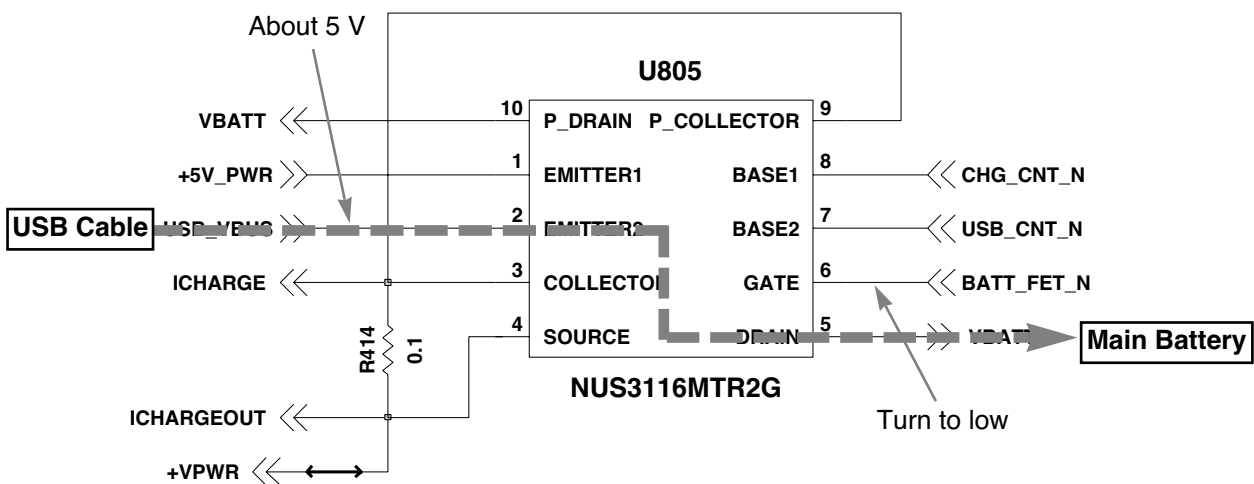
4. TROUBLE SHOOTING



4. TROUBLE SHOOTING

4.8 Charger Troubleshooting (USB Charging)

Battery Charging Circuit



Charging Procedure

- Connect USB
- Control the charging current by PM6650 IC
- Charging current flows into the battery

Check Point

- Connection of USB
- Charging current path
- Battery

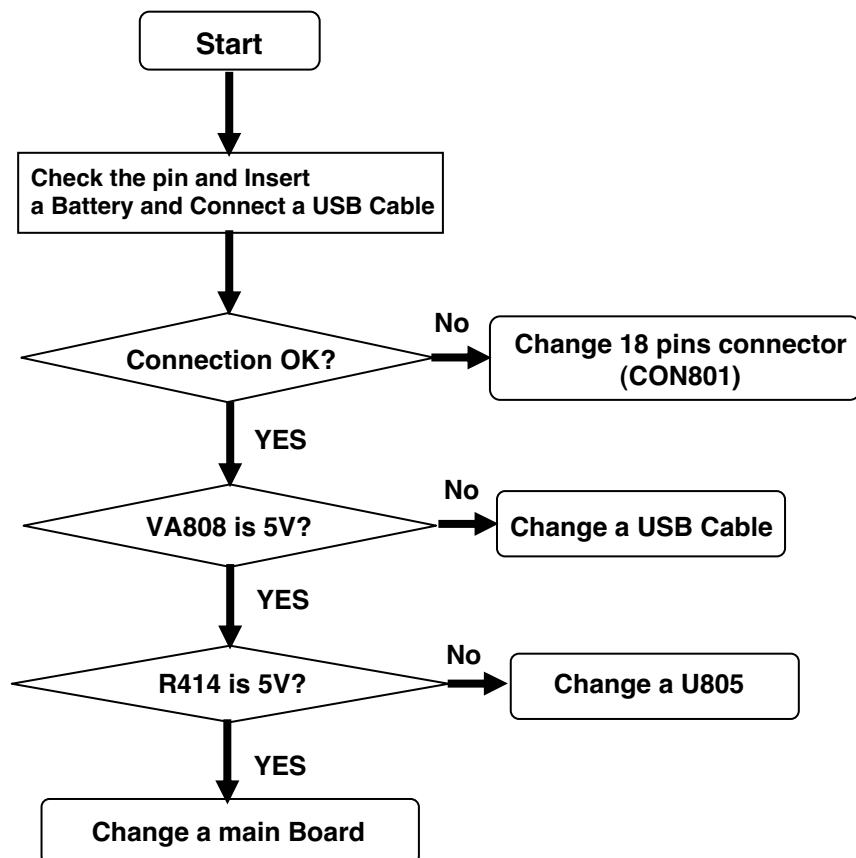
Troubleshooting Setup

- Connect USB and battery to the phone

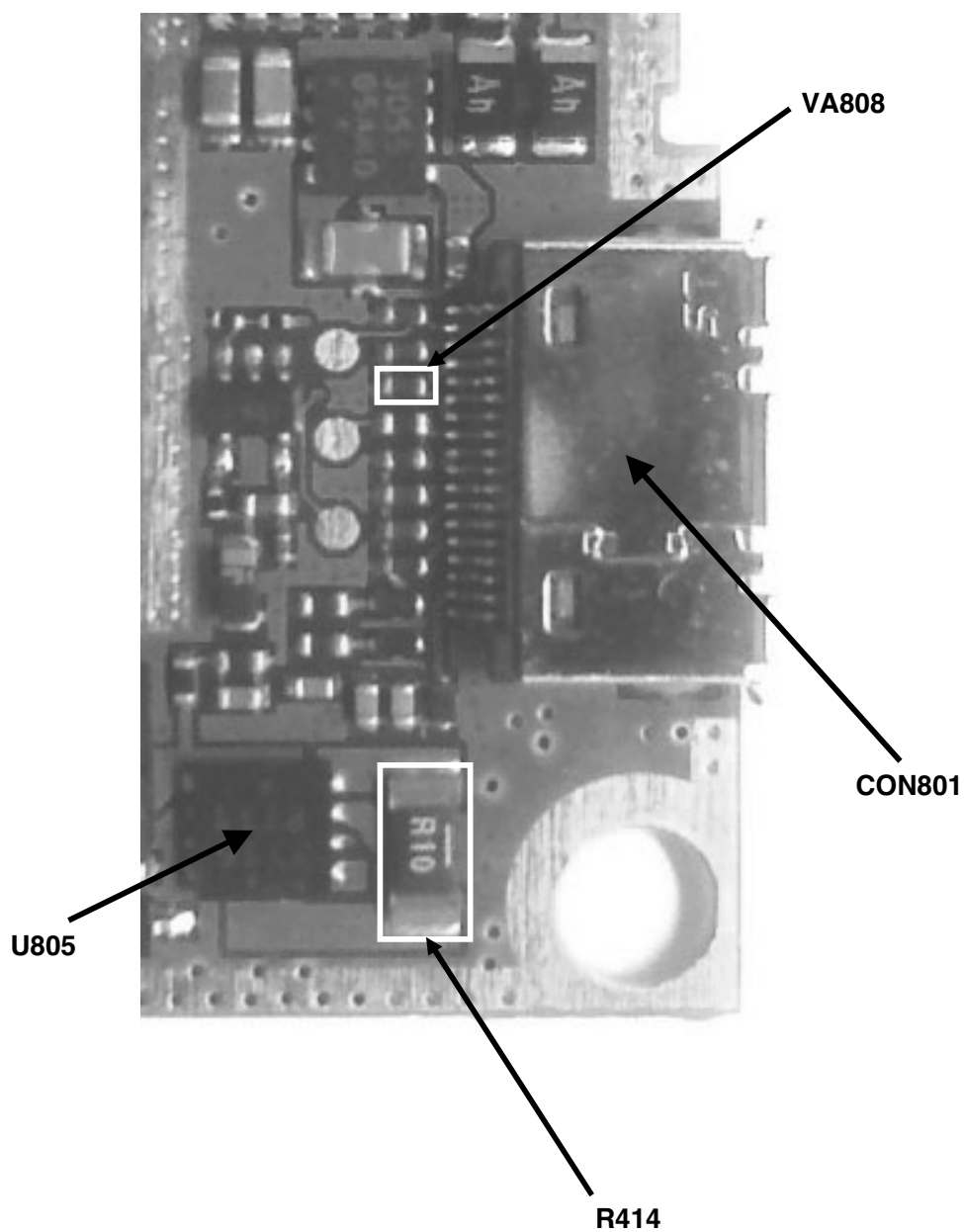
Troubleshooting Procedure

- Check the charger connector
- Check the charging current Path
- Check the battery

Troubleshooting Flow



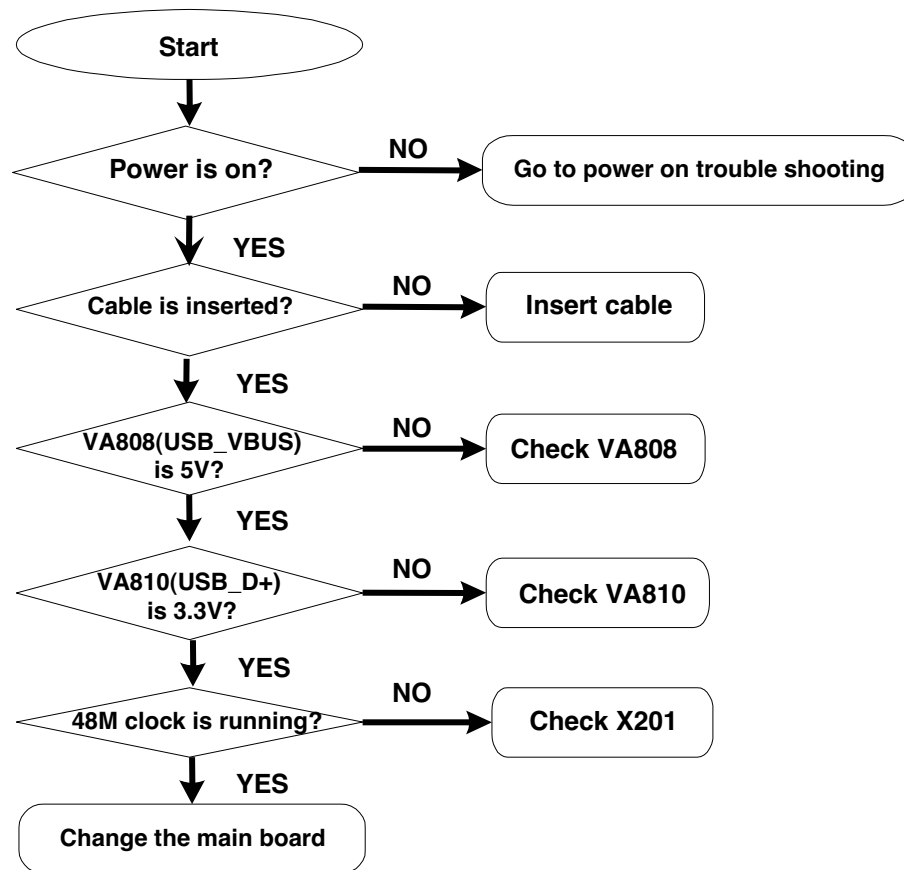
4. TROUBLE SHOOTING



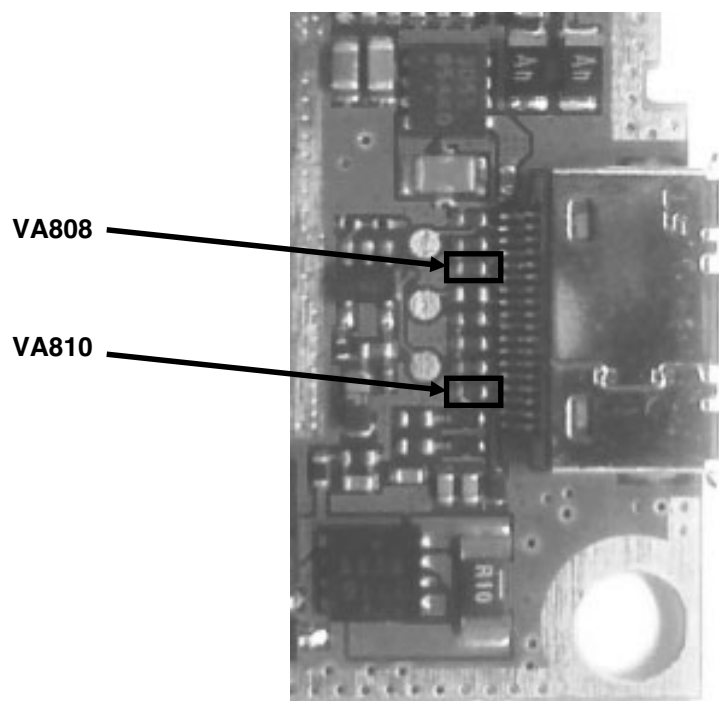
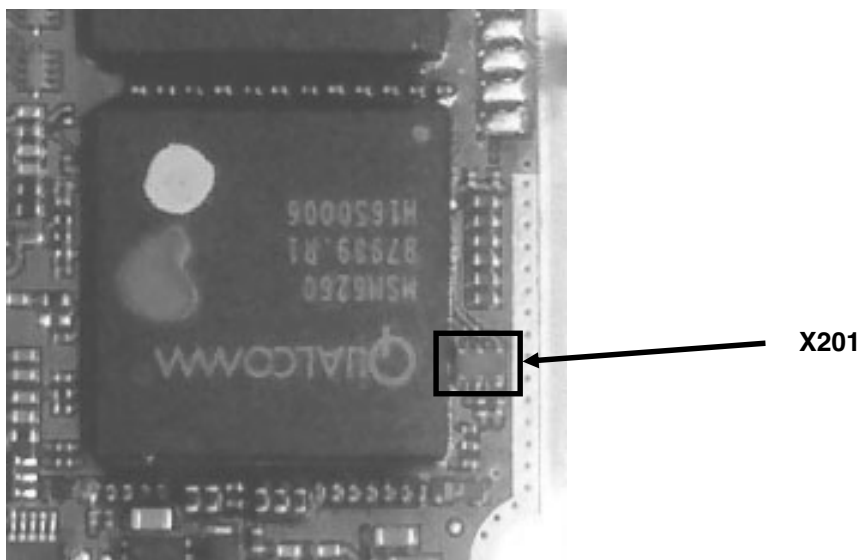
4.9 USB Troubleshooting

USB Initial sequence of CU575 is :

USB connected to CU575 power on → USB_VBUS go to 5V → USB_D+ go to 3.3V →
48M Crystal on → USB_VP and USB_VN is triggered → USB work.



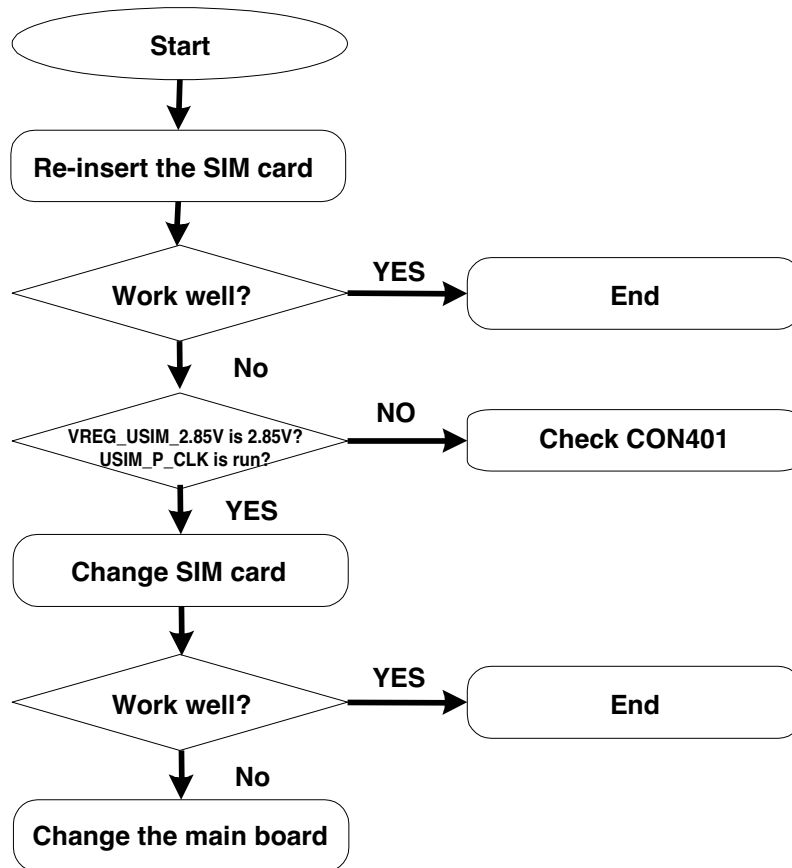
4. TROUBLE SHOOTING



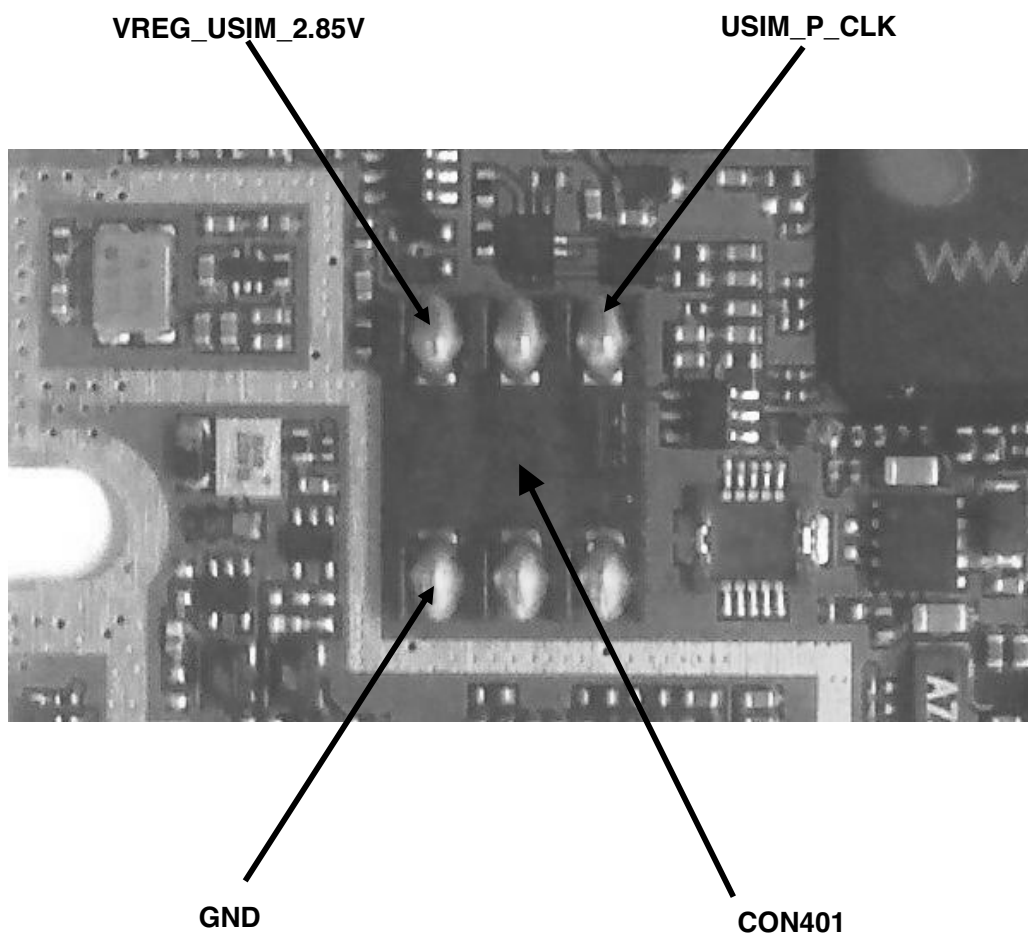
4.10 SIM Detect Troubleshooting

USIM Initial sequence of CU575 is :

USIM_CLK,USIM_RST,USIM_DATA triggered → VREG_USIM_2.85V go to 2.8V → USIM IF work

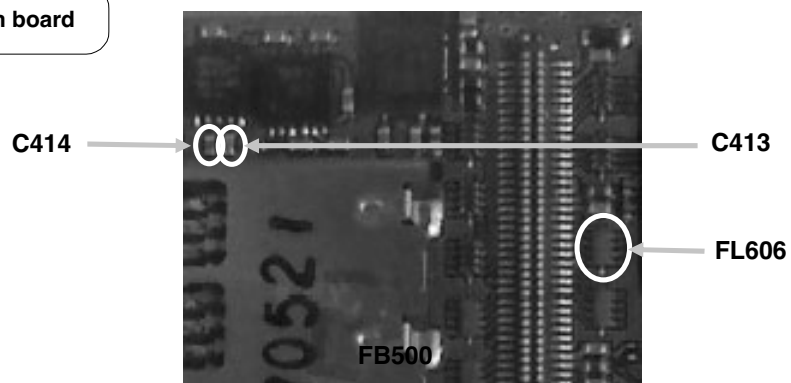
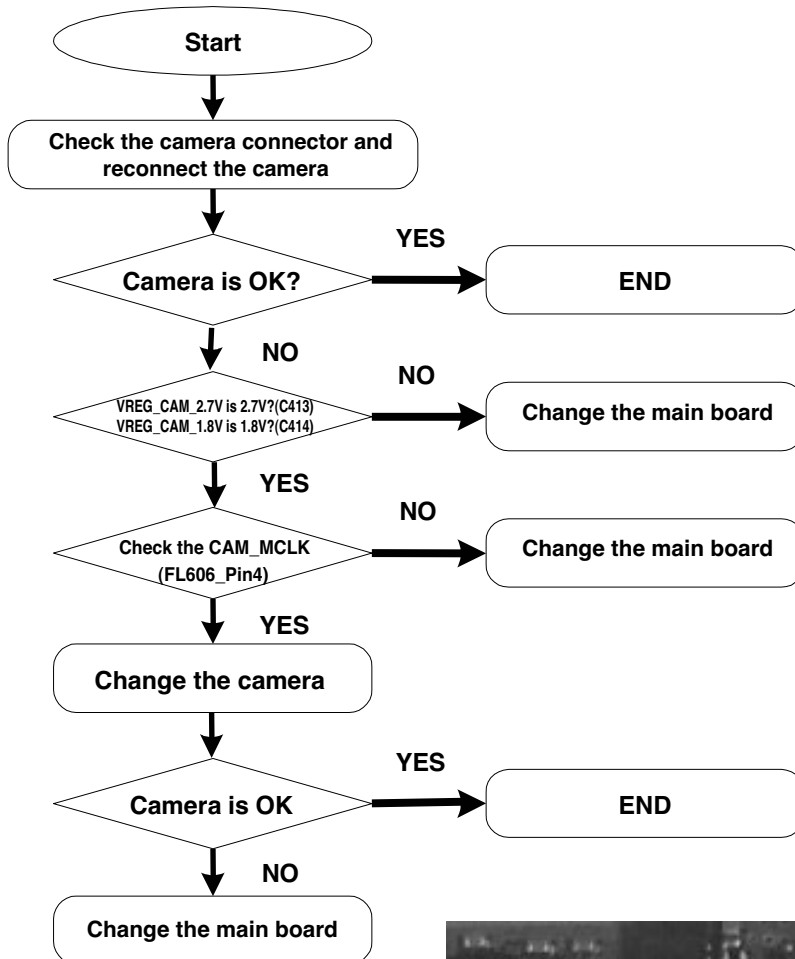


4. TROUBLE SHOOTING



4.11 Camera Troubleshooting

Camera control signals are generated by MSM6260.

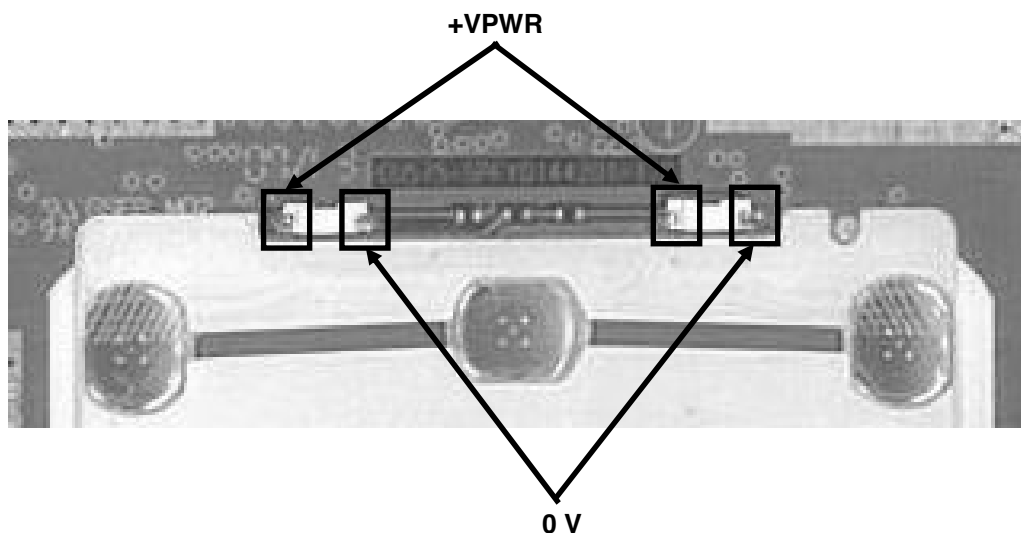
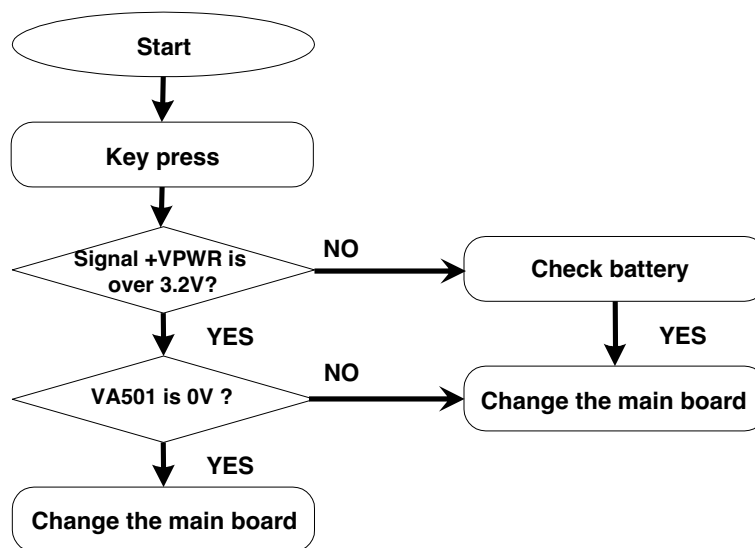


4. TROUBLE SHOOTING

4.12 Keypad Backlight Troubleshooting

Key Pad Back Light is on as below :

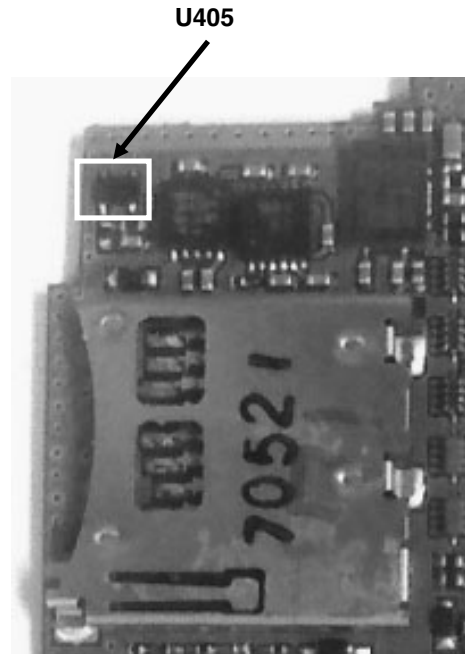
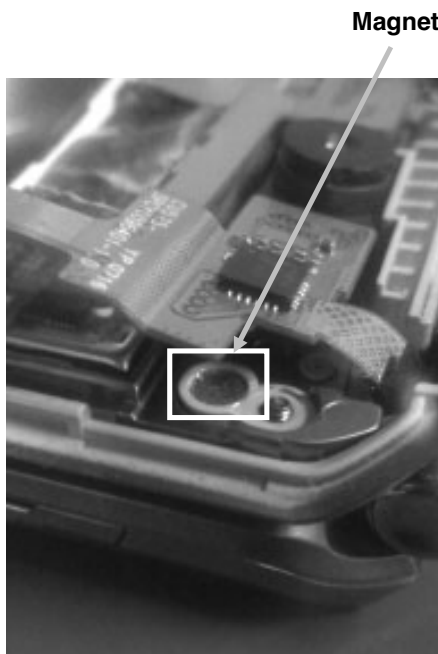
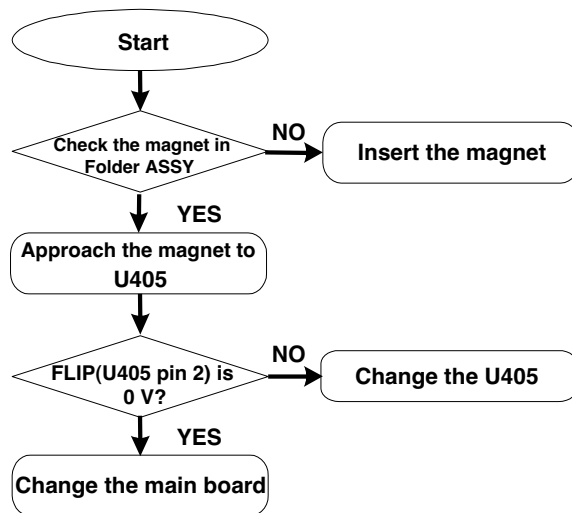
Key pressing → KYBD_BACKLIGHT go to 0V → Main LED On



4.13 Folder ON/OFF Troubleshooting

Folder On/Off is worked as below :

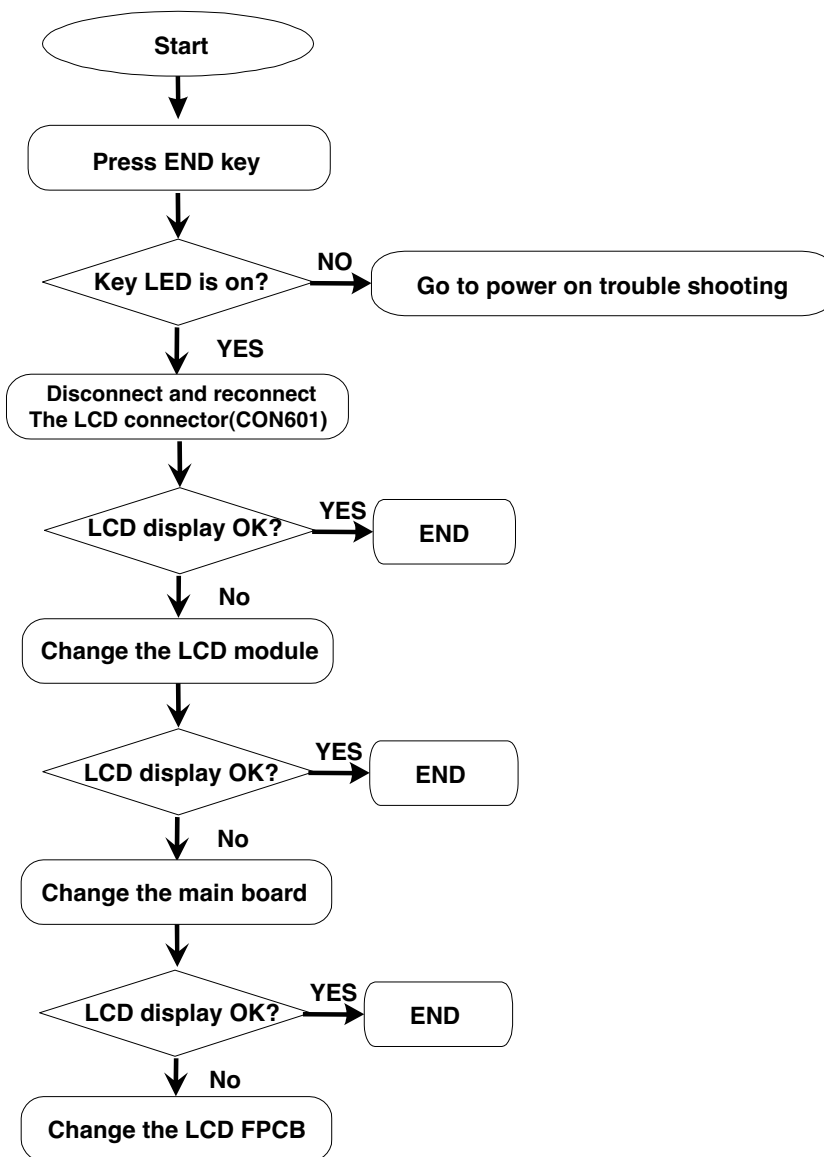
Folder On/Off Event -> FLIP(U405 pin OUT) is triggered(On : about 2.1V, Off : 0V) -> MSM6260 Sense the Folder Event



4. TROUBLE SHOOTING

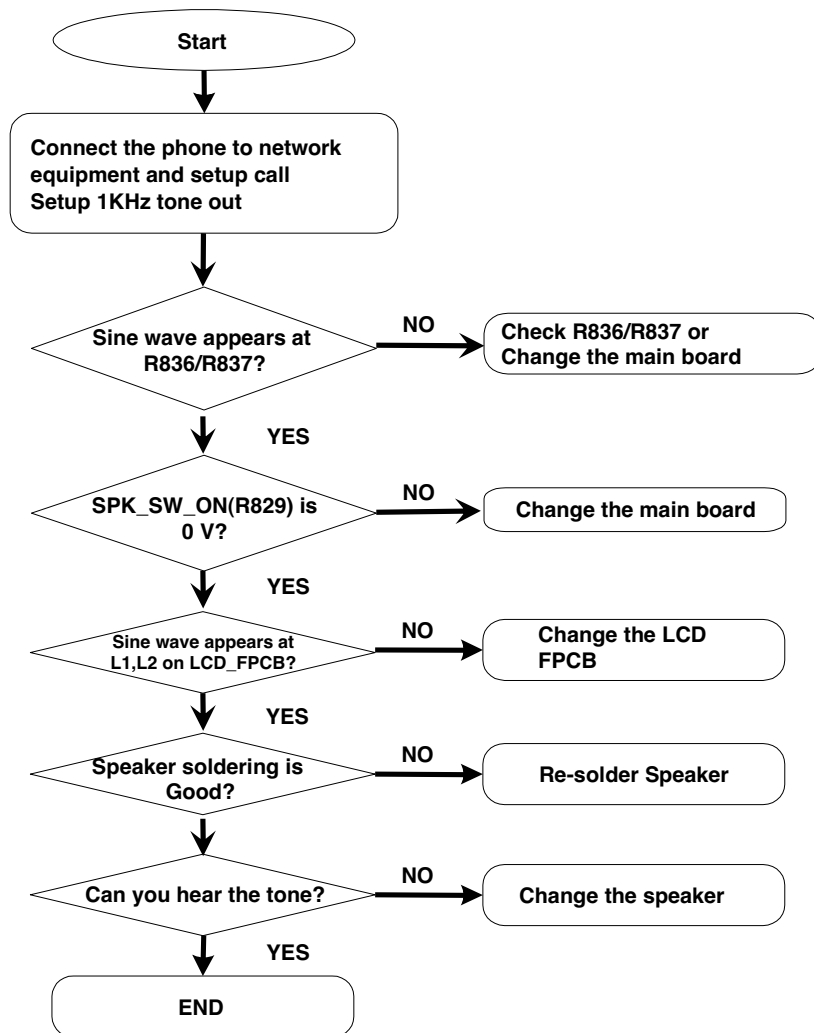
4.14 Main LCD Troubleshooting

Main LCD control signals are generated by MSM6260. The signal path is :
MSM6260 → C0N601(Main Board) → CN102(LCD FPCB) → LCD Module

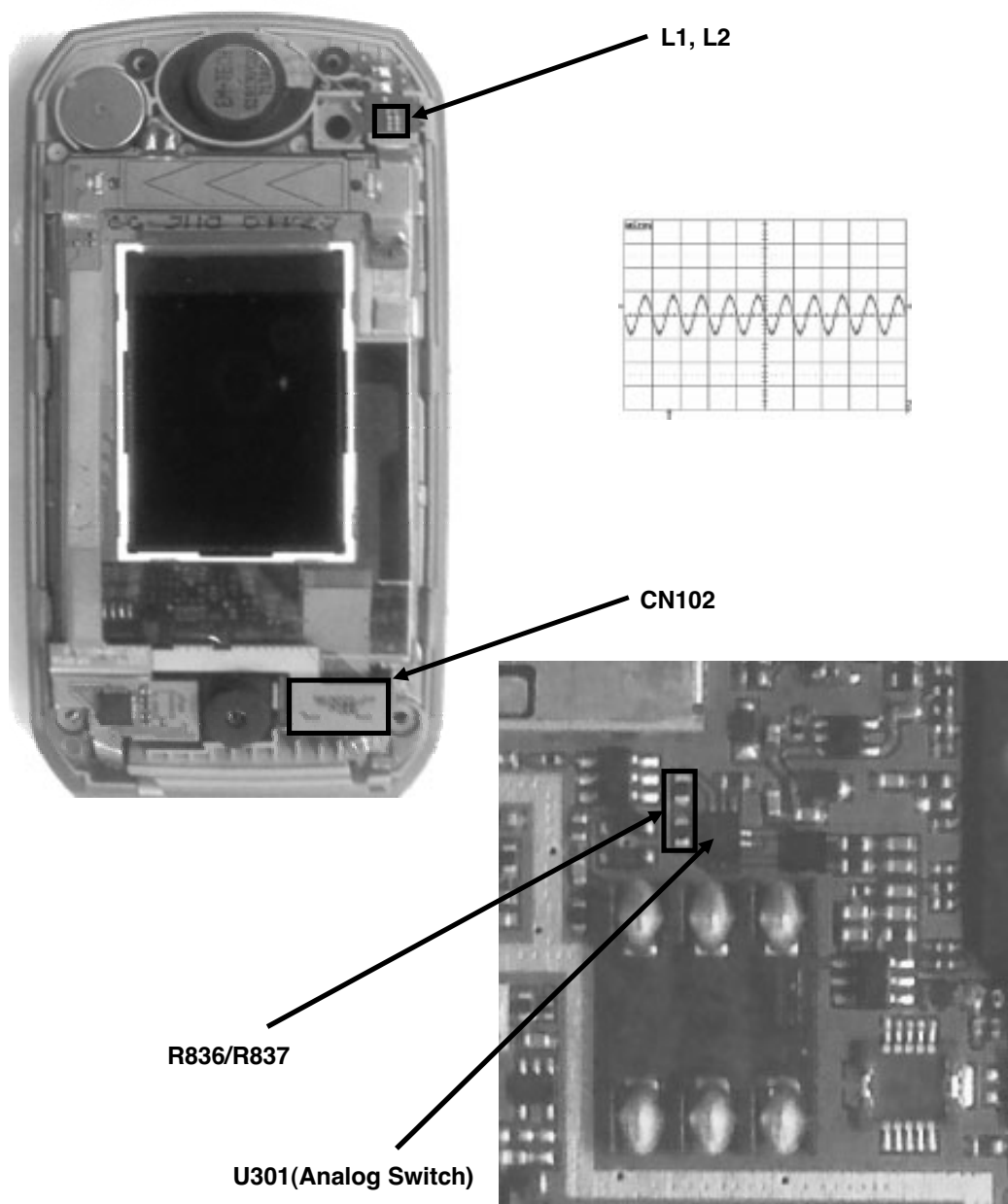


4.15 Receiver Path

MSM6260 RCV+/RCV- → R836/R837 → Analog Switch(U301) → CON601
L1,L2(LCD_FPCB) → SPKP,SPKN

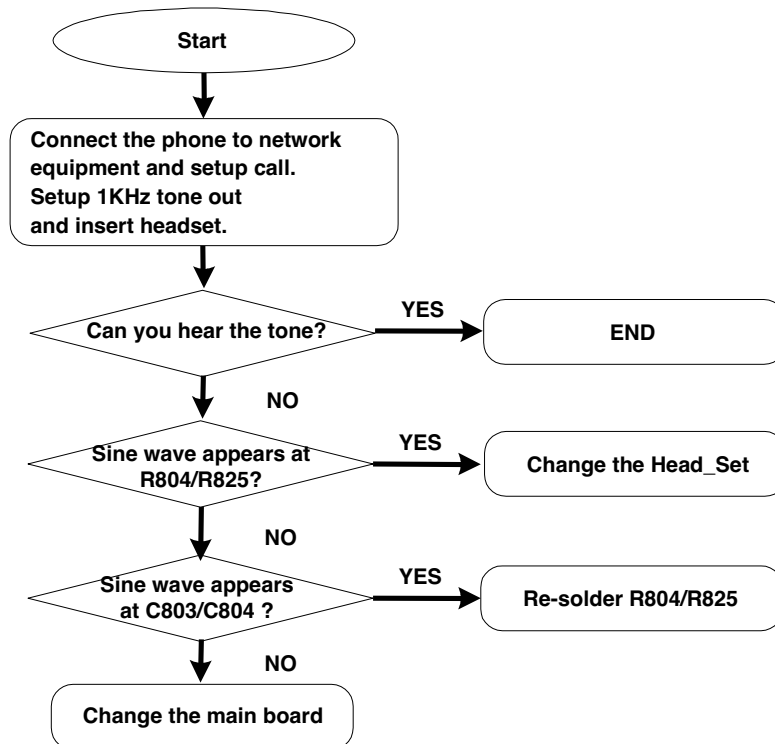


4. TROUBLE SHOOTING

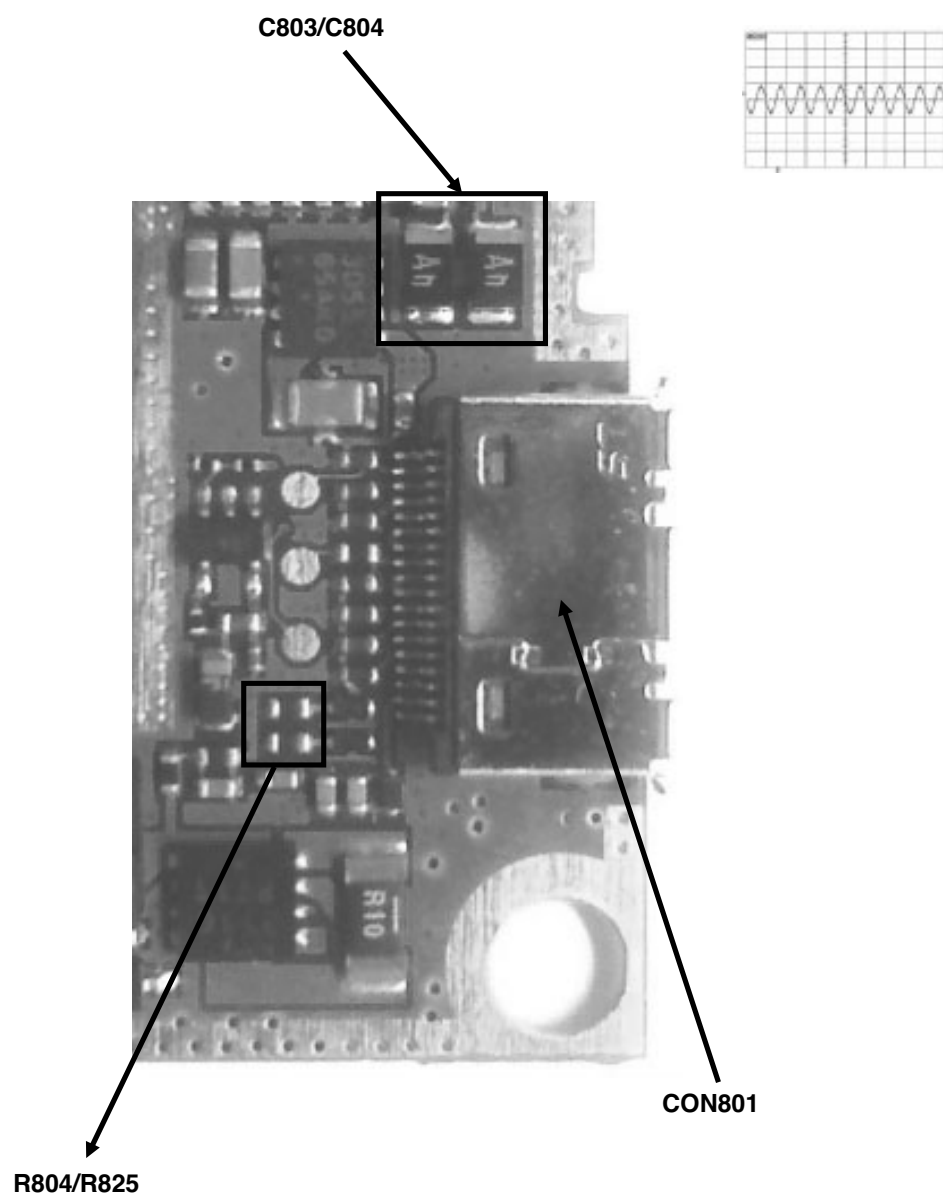


4.16 Headset path

MSM6260 HPH_R, HPH_L → C803/C804 → R804/R825 → CON801

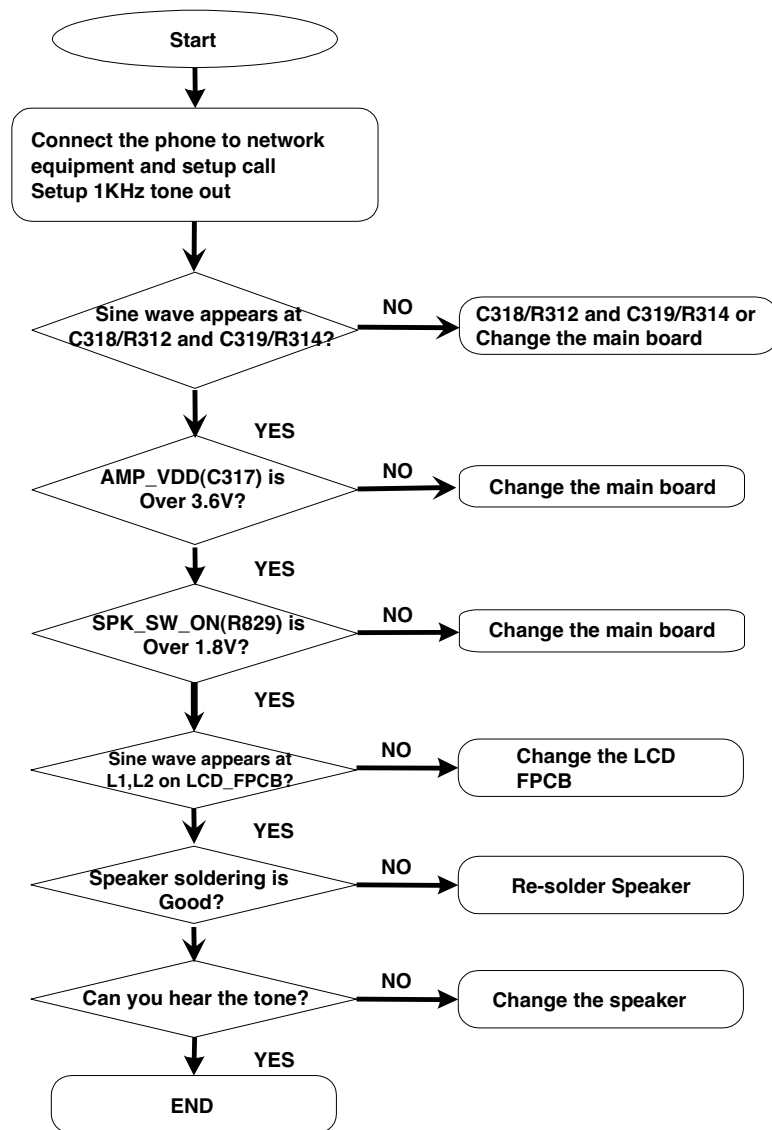


4. TROUBLE SHOOTING

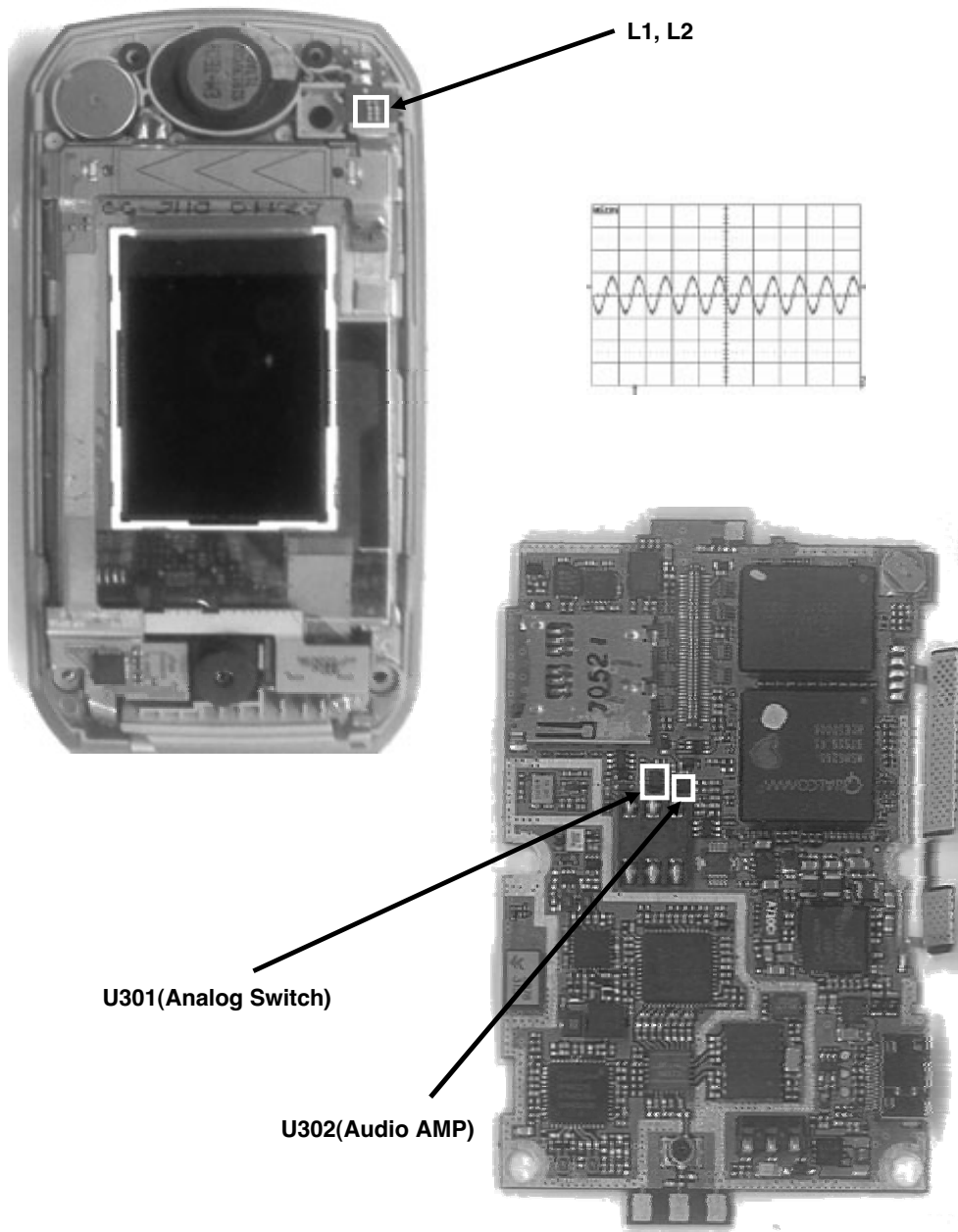


4.17 Speaker phone path

MSM6260(AMP_P,AMP_N) → Audio AMP(U302) → Analog Switch(U301) →
Main Connector(CON601) → L1,L2(LCD_FPCB) → SPKP,SPKN

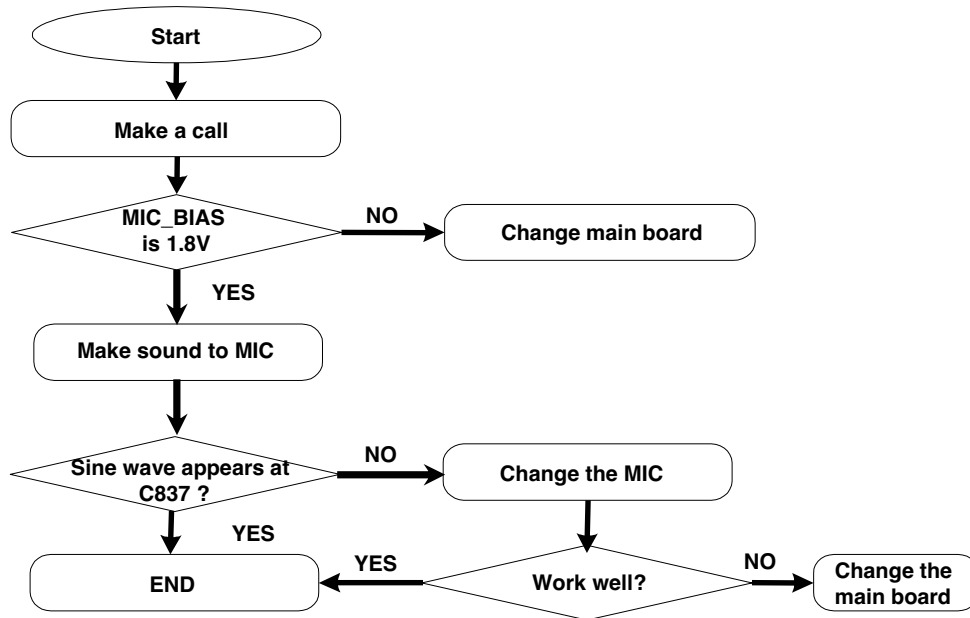


4. TROUBLE SHOOTING

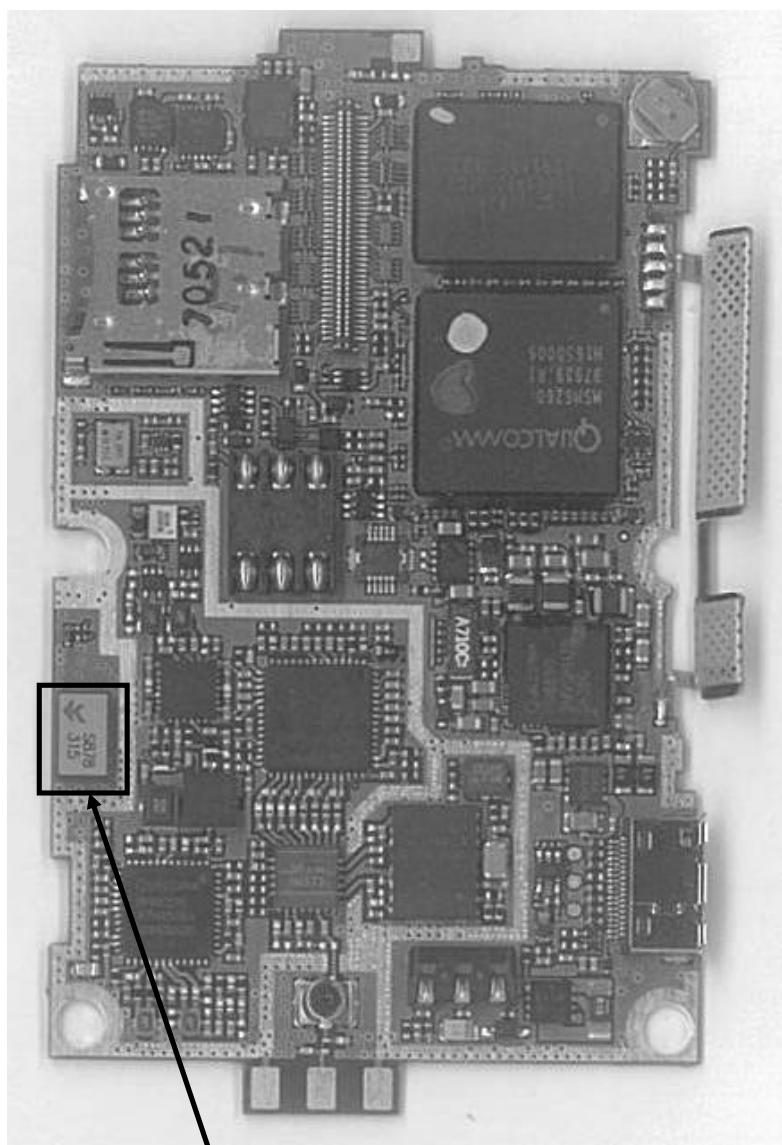


4.18 Main microphone

U303(MIC) → R834,C837 → MIC1P(MSM6260)



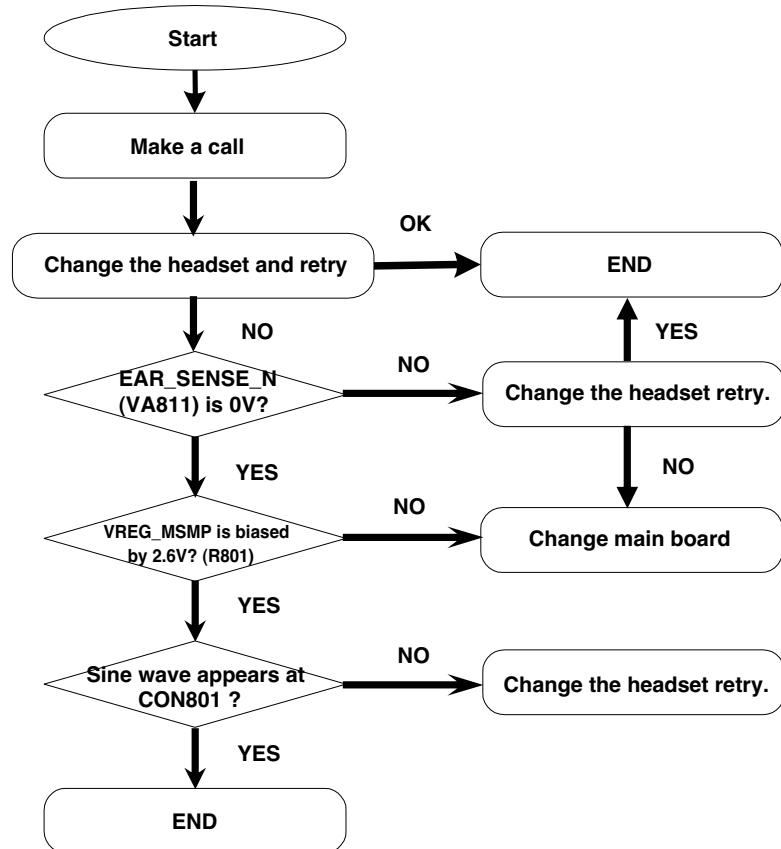
4. TROUBLE SHOOTING



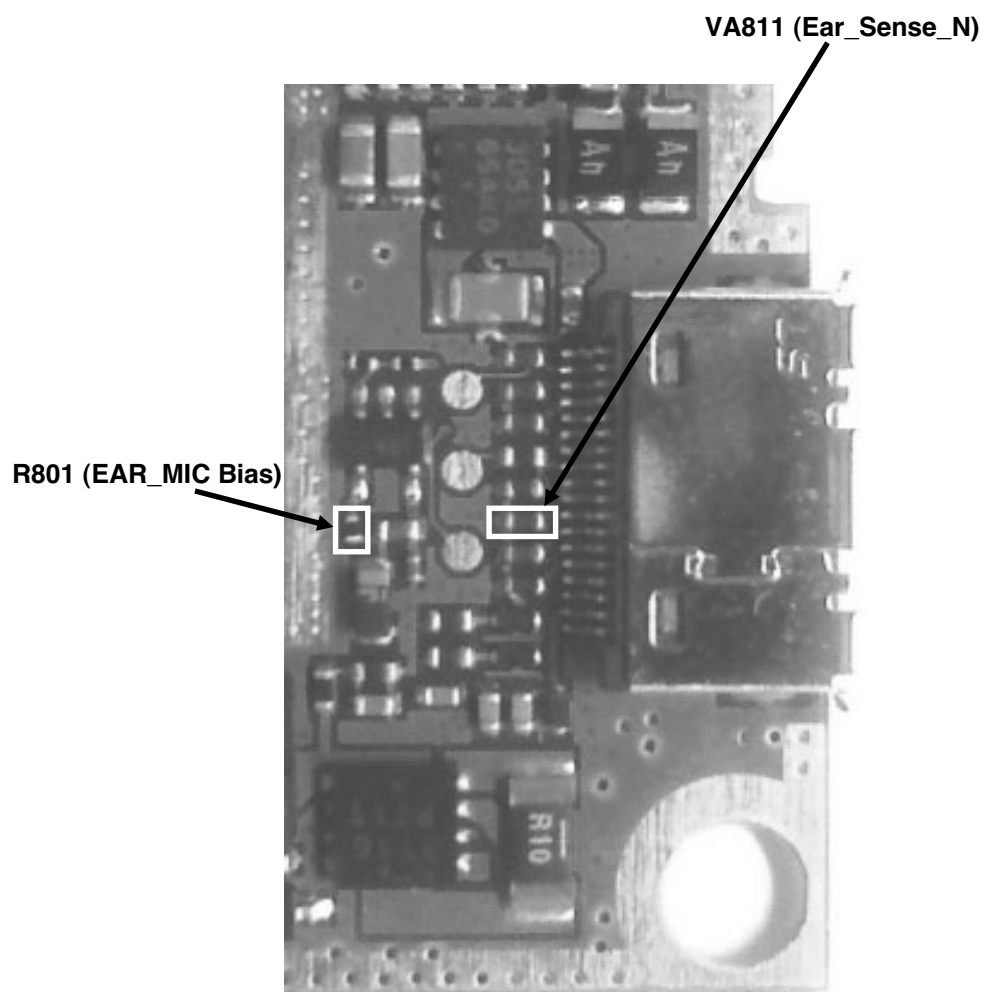
U303 (MIC)

4.19 Headset microphone

Headset → CON801 → C801 → MIC2P(MSM6260)



4. TROUBLE SHOOTING



5. DOWNLOAD

5.1 Introduction

LGMDP is a LGE application that allow users to download images from PC to handset.

LGMDP is a download tool with capabilities to upload image files to the handset. LGMDP is designed to be simple to use and easy enough for the beginner to upload executable images to the handset.

LGMDP supports Windows 2000/XP where the LG (Ver 4.6 or later) USB modem driver is installed.

Additionally, LGMDP allows multi downloading up to 8 handsets at the same time.

5.2 Downloading Procedure

1) Setup Preferences

Connect the phone to your desktop PC using the USB cable and run the LGMDP application. Before getting started, set up LGMDP preferences from the Preferences of the file menu the way you want. Click on the File menu and select Preferences.

➤ **Play a success sound**

This is an experimental feature. To enable this simply check the box. It will be played a .wav file when the download has been completed.

➤ **Automatically run "Select Port" When LGMDP starts**

This option is designed to give user convenient. When LGMDP starts, it will automatically select "Select Port" button to download new image file.

➤ **Always on Top**

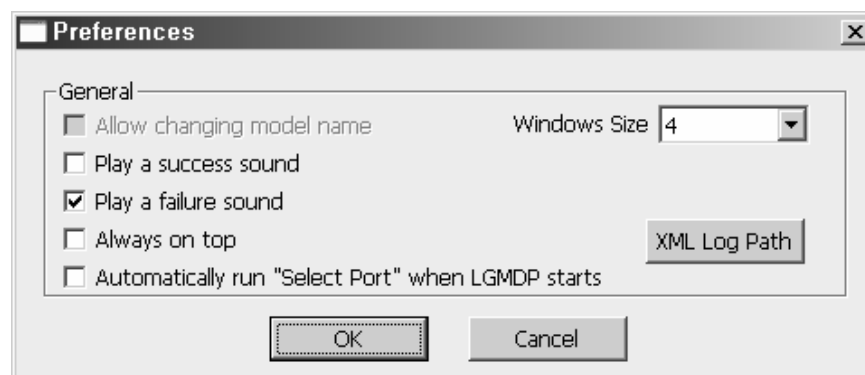
Check if LGMDP always appears at the top of the window so that user can monitor it all the time.

➤ **Windows Size**

If you want to change program window size, change this option.

➤ **XML Log Path**

You can change the directory path that XML log files are saved.

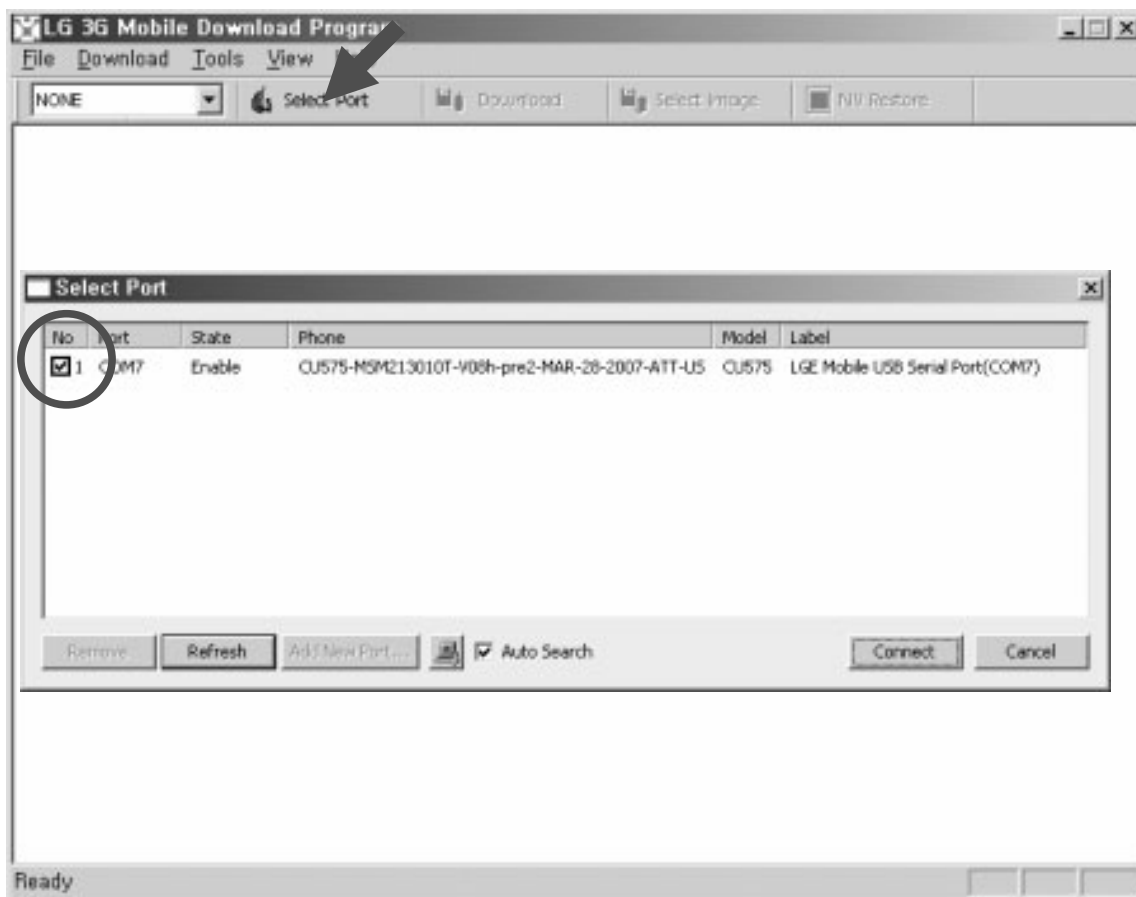


5. DOWNLOAD

1) Connecting to PC

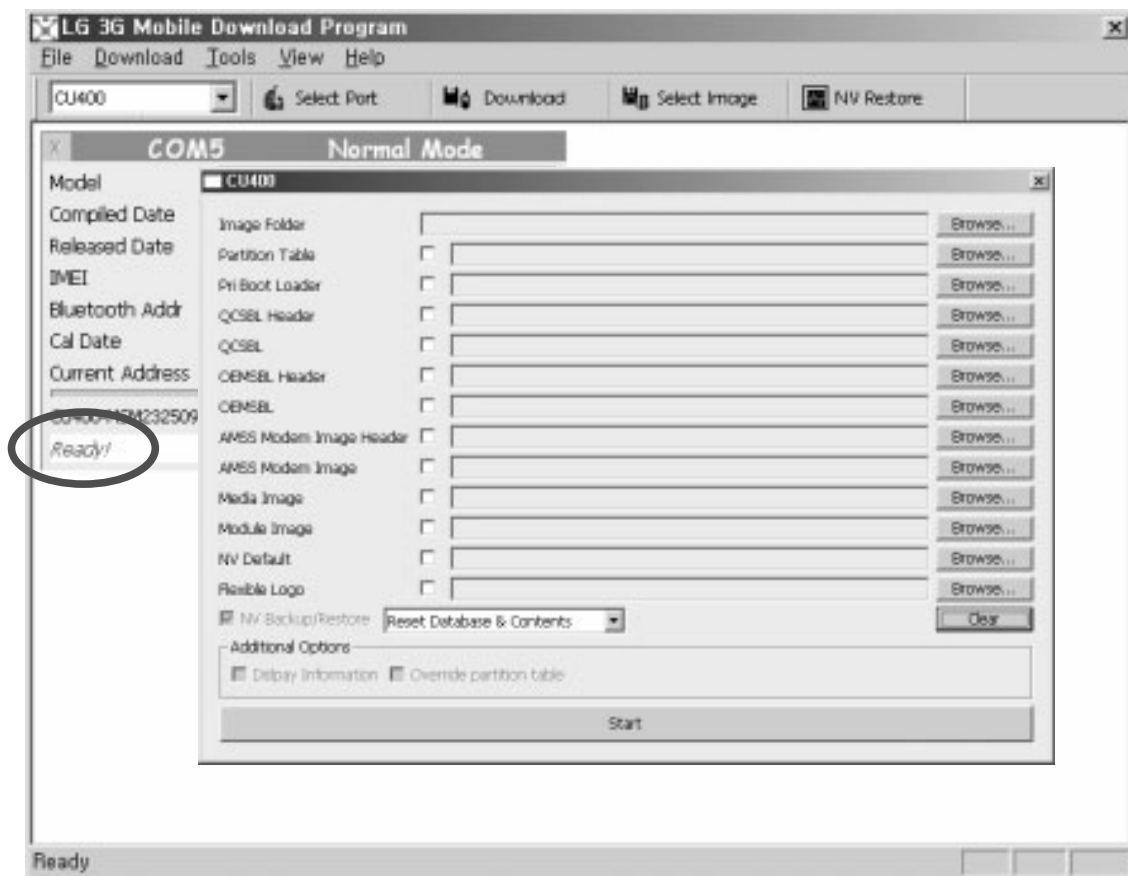
Click on the Select Port and then Select Port window will be pop up. Check if state shows Enable for the port to be connected for downloading images. Then click on the Connect button.

(The port number(COM7) and model name shall be different from that of the port number in the snapshot.)



5. DOWNLOAD

The status Ready is displayed when the application is ready for downloading. While the images are transmitted from PC to the handset, a progressive bar (Red box) indicating the degree of transmission of data is displayed.



5. DOWNLOAD

The following slide describes how to use or set options in detail.

(The model name shall be different from that of the model name in the snapshot.)

The screenshot shows the 'CU575' download utility window. It contains a list of files to be downloaded, each with a checkbox and a 'Browse...' button. The files are: Partition Table, QCSBL Header, QCSBL, OEMSBL Header, OEMSBL, AMSS Modem Image Header, AMSS Modem Image, Media Image, Module Image, NV Default, and Flexible Logo. Below the list are options for 'NV Backup/Restore' (checked), 'Reset Database & Contents' (dropdown), and 'Clear' (button). There are also 'Additional Options' and 'Display Information' sections. At the bottom are 'Start' and 'DZ' buttons. Numbered annotations are placed as follows: 1) points to the 'Image Folder' field; 2) points to the 'QCSBL' row; 3) points to the 'NV Backup/Restore' checkbox; 4) points to the 'Additional Options' section; 5) points to the 'Display Information' section; 6) points to the 'Clear' button; 7) points to the 'Start' button.

| Image Folder | D:\CU575\build\wms\bin\CU570FD | | Browse... |
|-------------------------|-------------------------------------|---|-----------|
| Partition Table | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\partition.mbn | Browse... |
| QCSBL Header | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\qcsblhd_cfgdata.mbn | Browse... |
| QCSBL | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\qcsbl.mbn | Browse... |
| OEMSBL Header | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\oemsblhd.mbn | Browse... |
| OEMSBL | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\oemsbl.mbn | Browse... |
| AMSS Modem Image Header | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\amsshhd.mbn | Browse... |
| AMSS Modem Image | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\amss.mbn | Browse... |
| Media Image | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FR\CU575-MEDIA-V08h-pre2-MAR- | Browse... |
| Module Image | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FR\CU575-MODULE-V08h-pre2-MA | Browse... |
| NV Default | <input type="checkbox"/> | | Browse... |
| Flexible Logo | <input checked="" type="checkbox"/> | D:\CU575\build\wms\bin\CU570FD\booting_logo.flb | Browse... |

☒ NV Backup/Restore Reset Database & Contents 6) Clear

3) Additional Options 4)

5) Display Information

7) Start DZ

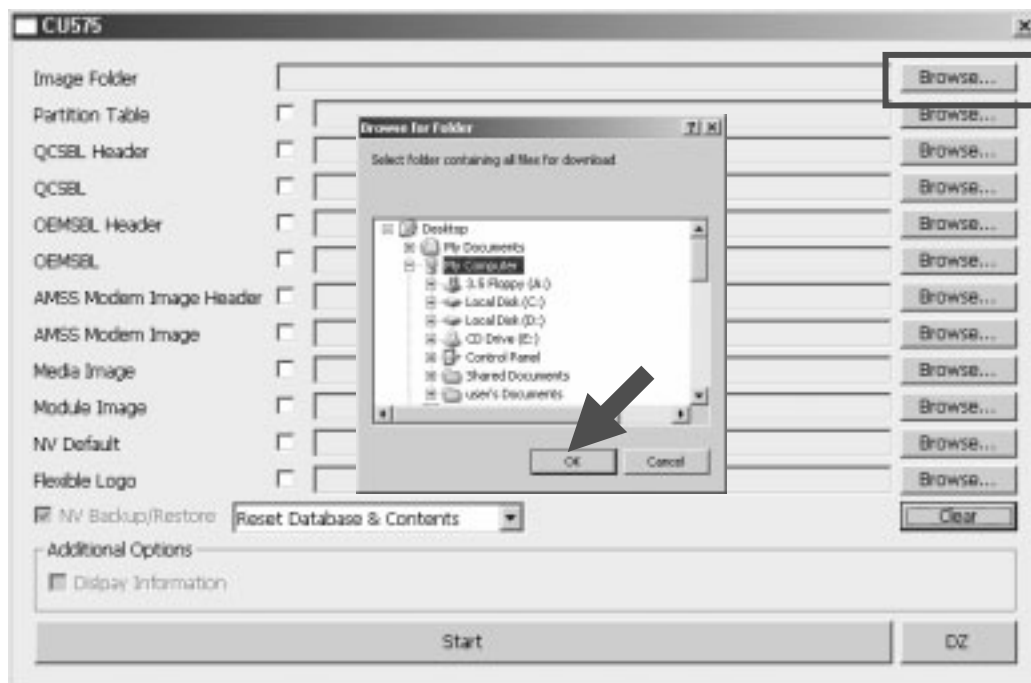
- 1) Image Folder indicates loot path where all image files are placed. To change location of the default image path, select Browse... button. The edit box shows the file path where new images are located. Please note that all images should be located in a selected folder. (This program support the automatically loading image for some models based on MSM6275 ,MSM6280, MSM6260, MSM6245)
- 2) Click on the Browse... button to select image files to be downloaded on the handset.
- 3) NV Backup/Restore: NV Backup/Restore always have to be done, and it is default selected option. Backup the NV data and restore the backed up NV data automatically.
- 4) Reset database & Contents: User related data including the setting data on the EFS is reset in the handset. The contents in the handset will be erased.
Erase_EFS: The calibration data, user contents, media, and module are erased. Only calibration data is kept when NV backup/restore is checked.
Keep All Contents: Maintain user data including WAP, AD, DRM, Email, Play lists, images When downloading a new images, user data stated above are maintained if this option is enable.
- 5) Additional Options:
Display Information is defaulty not selected and user cannot choose.
Security: The security option is automatically selected based on the selected country when security box is selected.
 - Integrity is selected when the selected country is UK, Italy, Hong Kong, Austria, or Israel.
 - Ciphering is not applied or used for H3G user.
 - Fake Security is not applied or used for H3G user.
 - Integrity + Ciphering is selected when the selected country is Australia, Sweden, or Denmark.Please note that user cannot select the options stated above on the security
- 6) Clear: Clearing all directory paths of images in the dialog.
- 7) Clear: Clearing all directory paths of images in the dialog.
- 8) Start : Starting downloading the selected individual image.

5. DOWNLOAD

2) Choosing image files

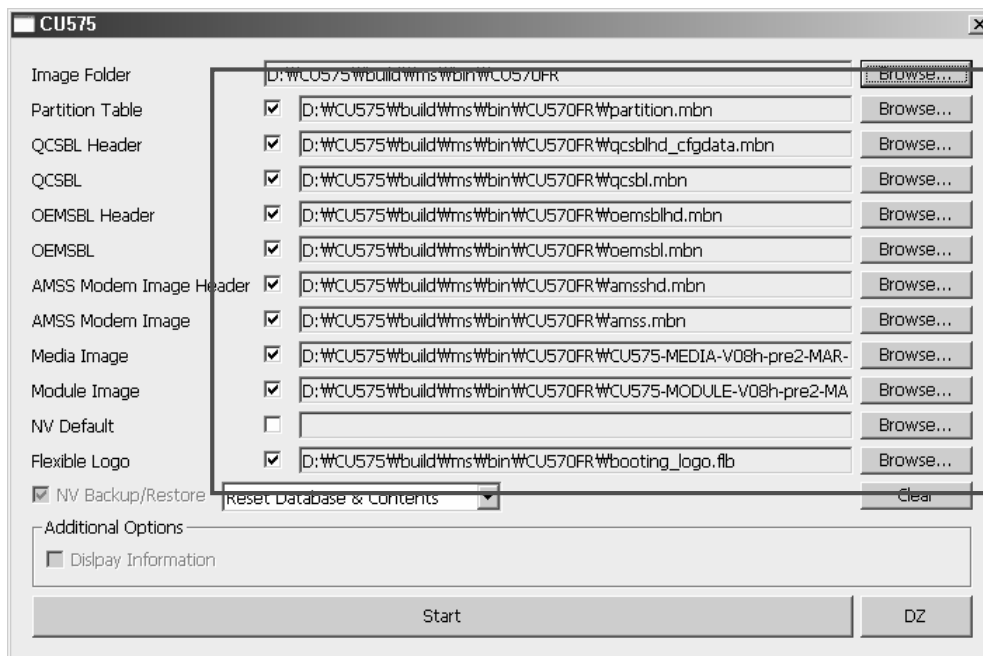
Select the image folder, where all the image files are located, by clicking on the Browse... button. (The folder name shall be different from that of the folder name in the snapshot. The folder name indicates the path where the image files are located.)

★ if you select the image folder, the program will automatically load images accordingly.



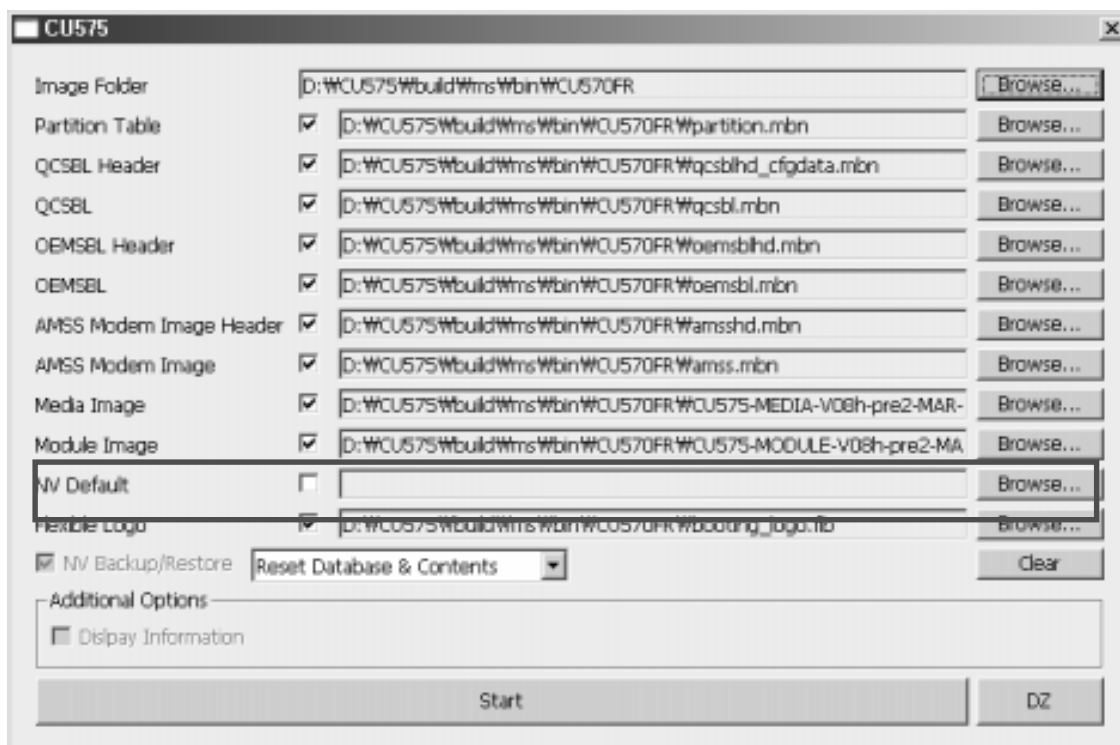
5. DOWNLOAD

★ if you select the image folder, the program will automatically load images accordingly.



5. DOWNLOAD

If NV restore is failed, then the NV Data(*.nv2) is erased permantly. In this case, choose the desired NV file to be downloaded on the handset. To enable this simply check the box or select the NV file from the LGMDP installation directory by clicking on the Browse... button.

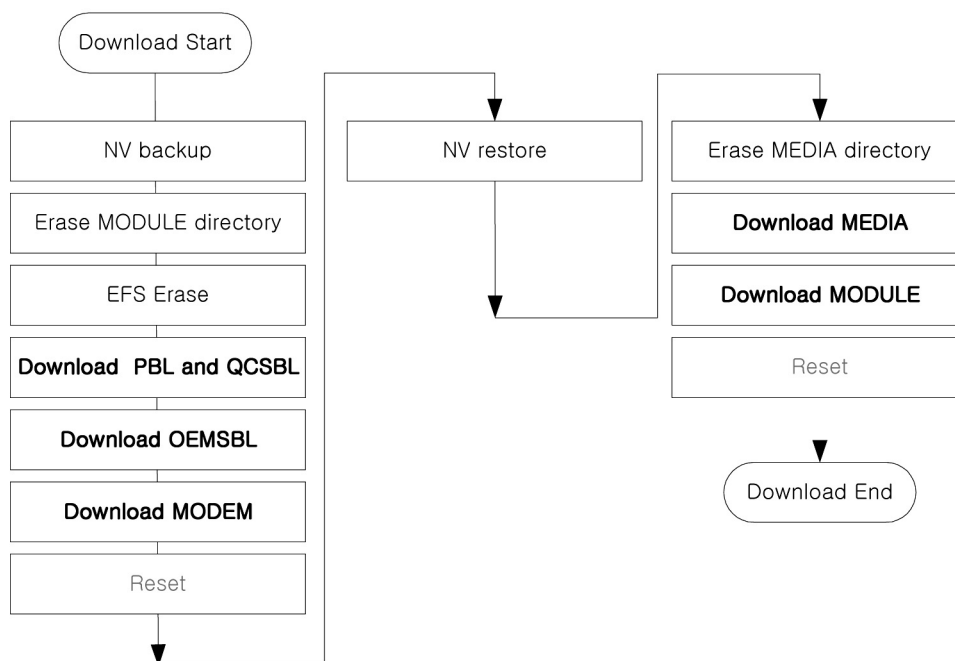


Click on the START button to start downloading.

Normally LGMDP will download all files that need downloading. To download selected image file only simply select the image file that user want to process downloading.

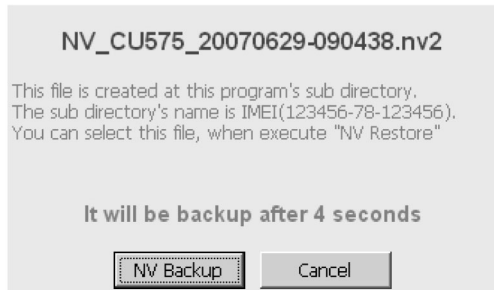
3) Downloading

The following flow chart is whole process for downloading images to the handset. You will see snapshots for each step in the succeeding slides.

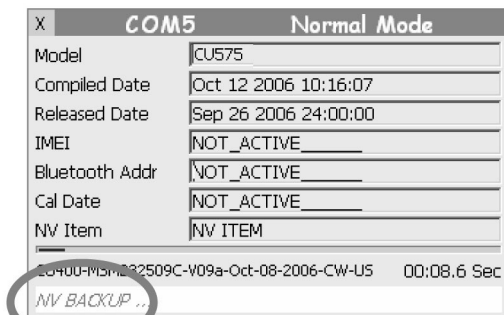


<Download process>

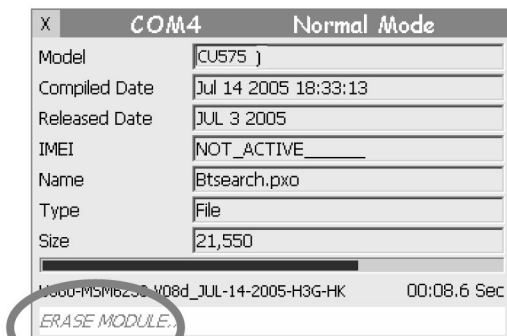
5. DOWNLOAD



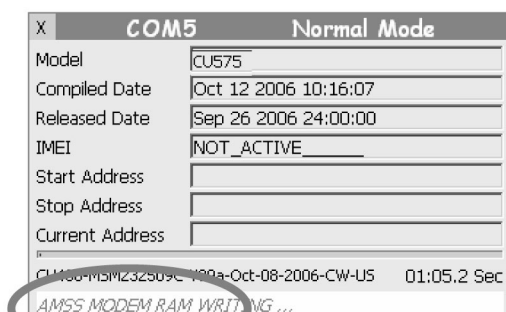
- This message box informs that a new file for NV backup will be created in the displayed file name in the LGMDP installation directory.



- Backing up NV data and backed up NV data will be stored in the LGMDP installation directory.



- Erasing the existing directories and files before the Module image is downloaded.

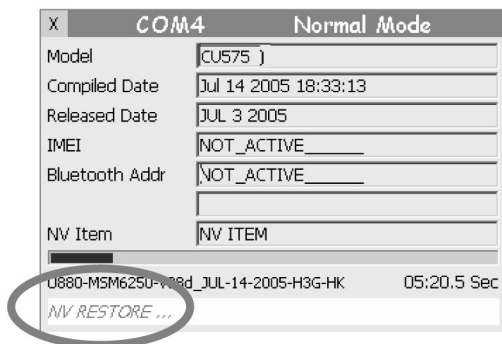


- Downloading the AMSS modem image

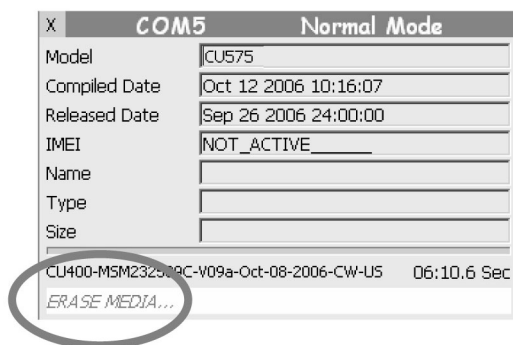
5. DOWNLOAD



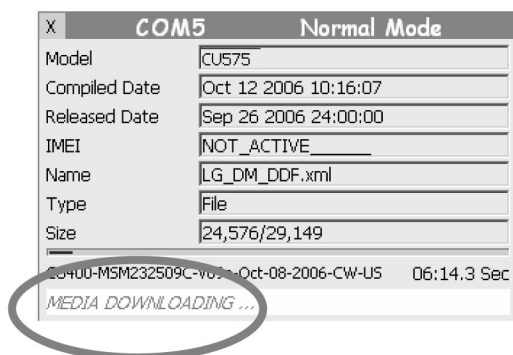
- Rebooting the handset and re-establishing the connection



- Restoring NV data which backed up in the Backing up process. User can also restore NV data using NV Default image selection.



- Erasing the existing directories and files before downloading the selected Media image



- Downloading Media image in progress

5. DOWNLOAD

| X | COM5 | Normal Mode |
|---|----------------------|-------------|
| Model | CU575 | |
| Compiled Date | Oct 12 2006 10:16:07 | |
| Released Date | Sep 26 2006 24:00:00 | |
| IMEI | NOT_ACTIVE | |
| Name | Calculator.pxo | |
| Type | File | |
| Size | 40,960/43,870 | |
| CU400-MBM232509C-M09a-Oct-08-2006-CW-US 07:57.0 Sec | | |
| MODULE DOWNLOADING ... | | |

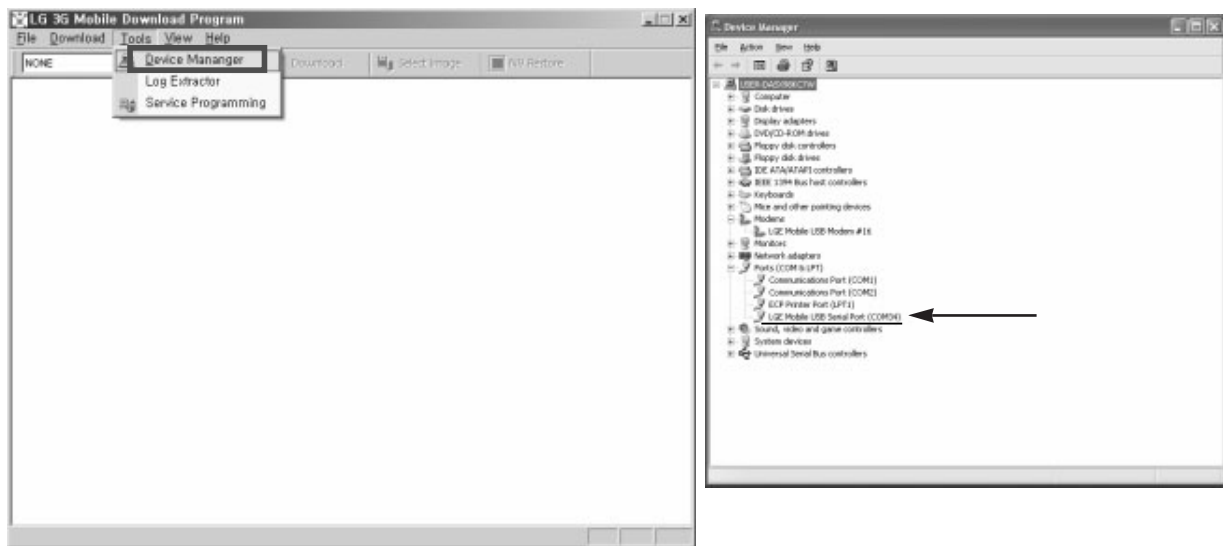
- Downloading Module image in progress

| X | COM5 | Download End |
|---|----------------------|--------------|
| Model | CU575 | |
| Compiled Date | Oct 12 2006 10:16:07 | |
| Released Date | Sep 26 2006 24:00:00 | |
| IMEI | NOT_ACTIVE | |
| Bluetooth Addr | NOT_ACTIVE | |
| Cal Date | NOT_ACTIVE | |
| Current Address | | |
| CU400-MBM232509C-M09a-Oct-08-2006-CW-US | | 10:09.3 Sec |
| Download Completed! | | |

- Downloading process has completed successfully

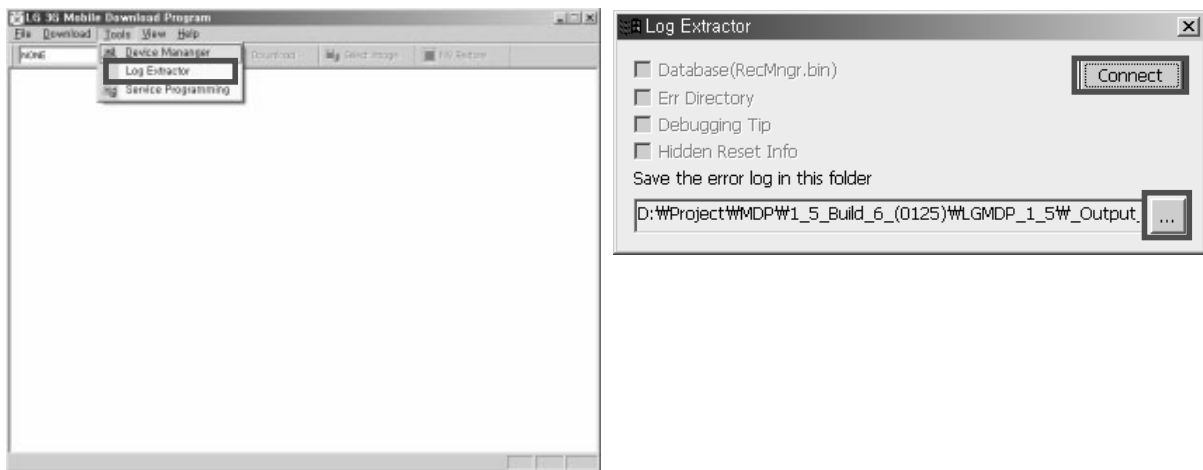
4) Tools

Device Manager allows to monitor current hardware that is installed on your PC. Device Manager is designed to monitor USB connectivity and check where the COM has been installed . Select Device Manager from the Tools of the file menu.



5. DOWNLOAD

Log Extractor is designed to extract log information from handset and store log related files in the selected root path in PC. This function is very useful for debugging. Select Log Extractor from the Tools of the file menu, and connect the phone with LGMDP by clicking on the Connect button. When clicking on the Connect button, this checks if the appropriate files such as LFAPP/RecMngr.bin, err directory, Debugging_Tip.txt, or Hidden_info.bin are placed on the handset. If they are exist, then appropriate check boxes are checked accordingly. Select directory to store log files by clicking on the ... button.

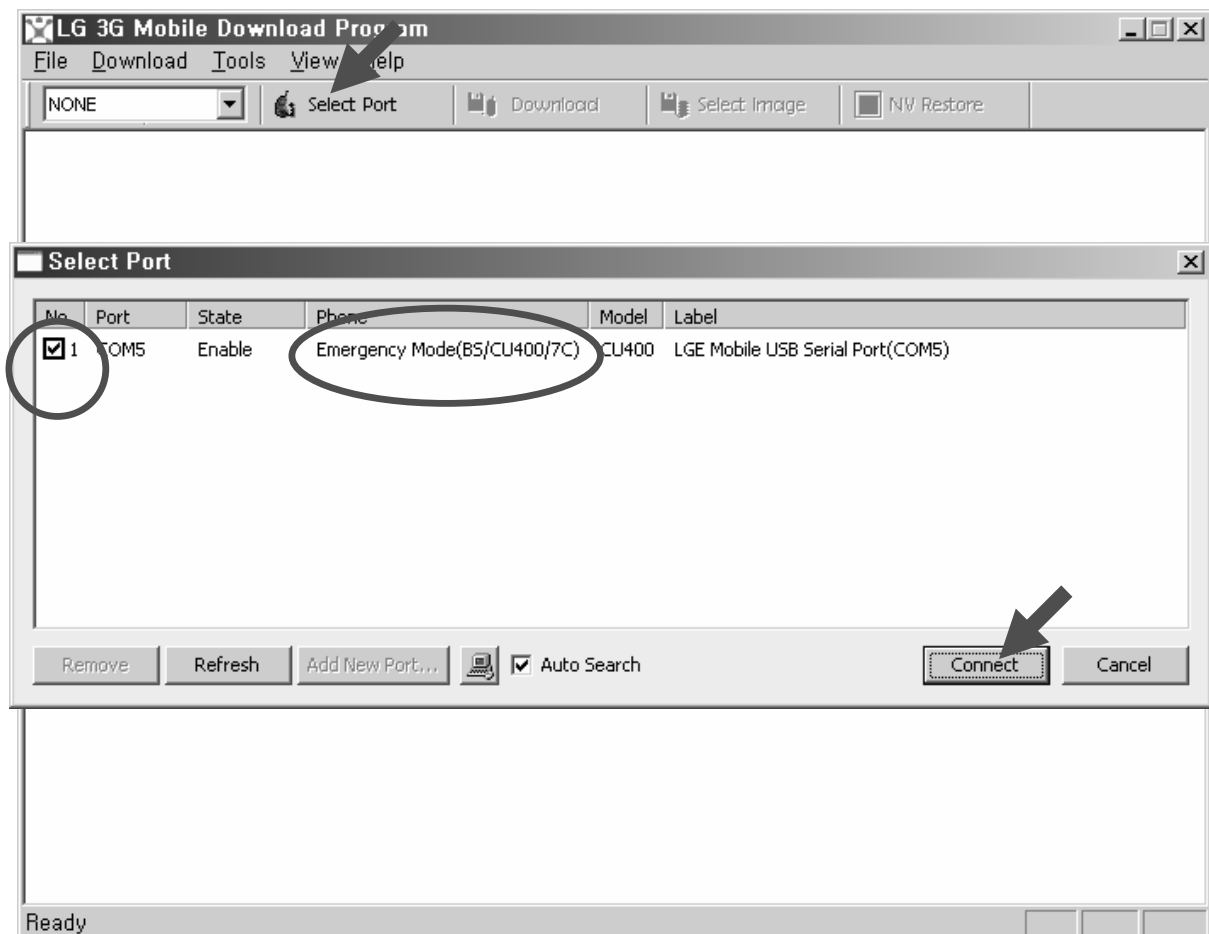


5.3 Troubleshooting Download Errors

1) When the phone does not work

→ Reboot the phone as the emergency mode (keep pressing “2” and “5” key while the phone is being booted). and then try to download the images again.

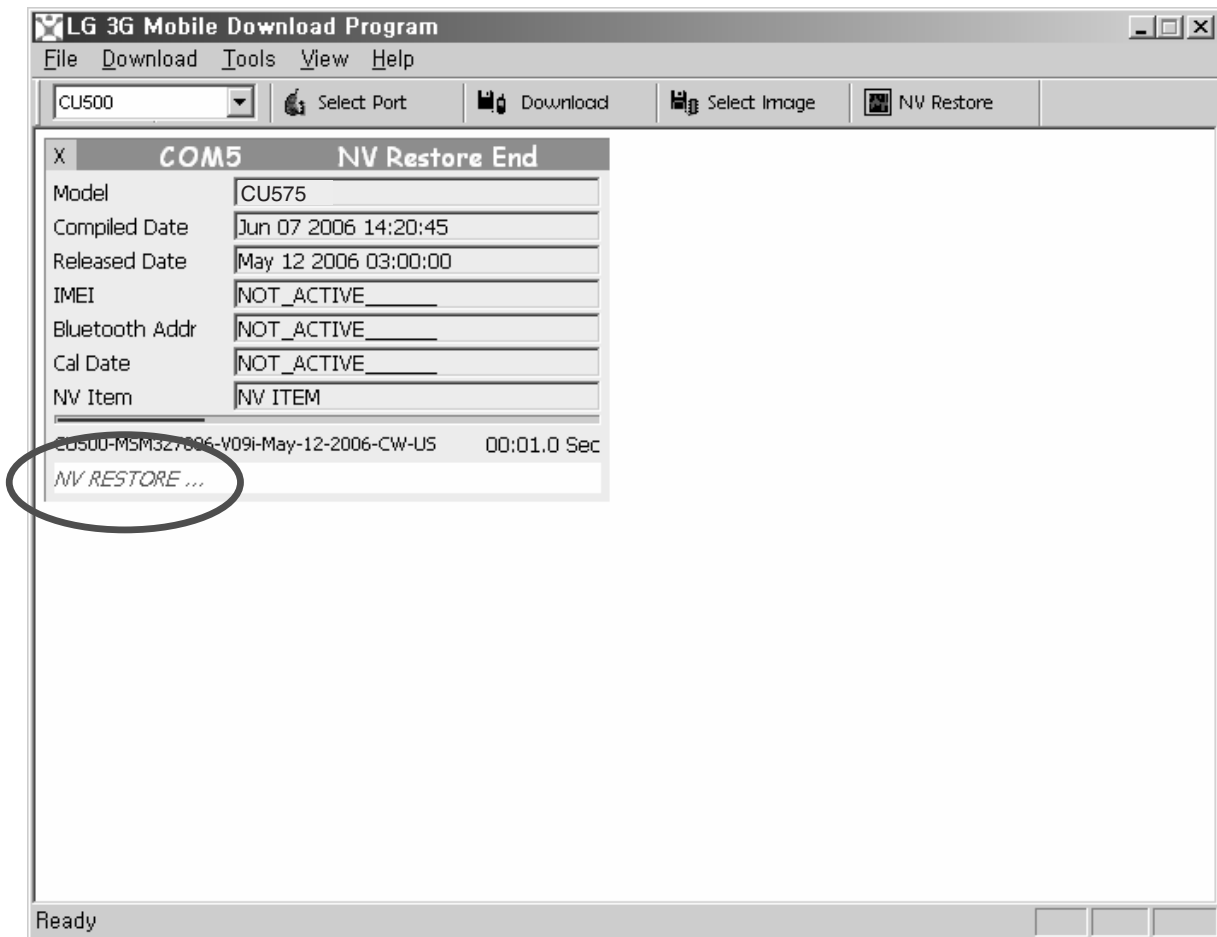
★ The phone supports a special mode named emergency mode. In this mode, minimum units for downloading is running so that users can download the images again in case of emergency situation. (AMSS Modem, Media and Module Images don't be running in this mode.)



5. DOWNLOAD

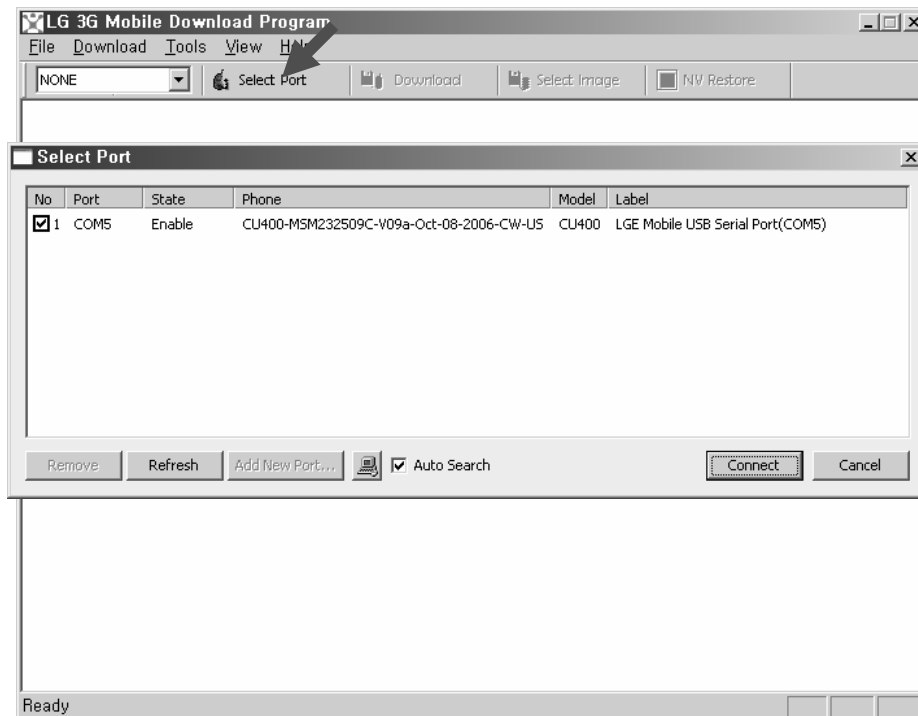
2) NV Restore error

When you meet the “NV Restore error”,

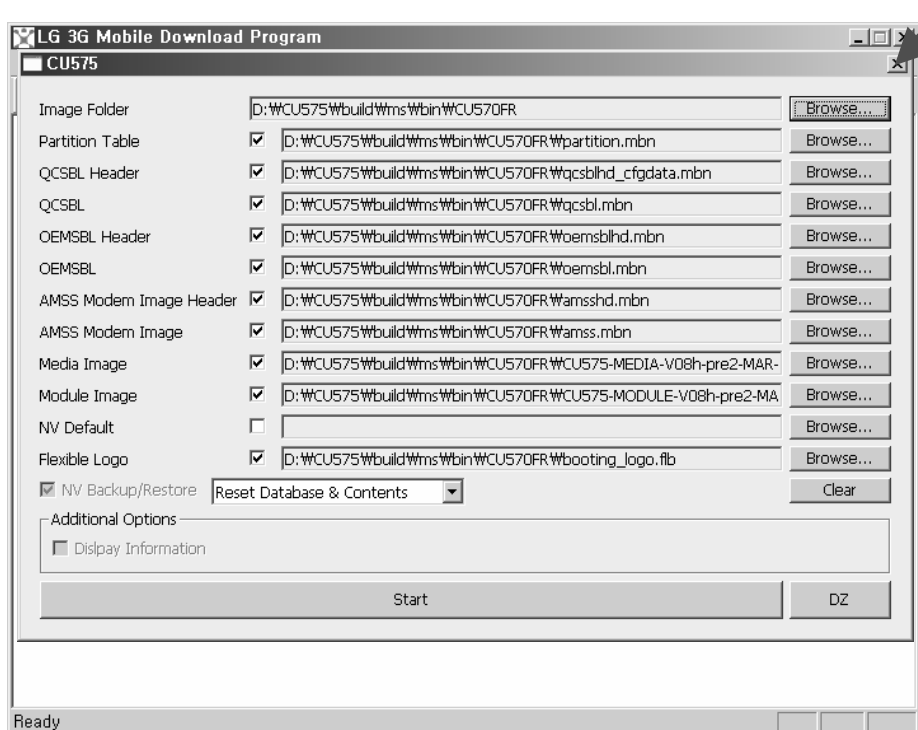


5. DOWNLOAD

→ Connect to the phone.



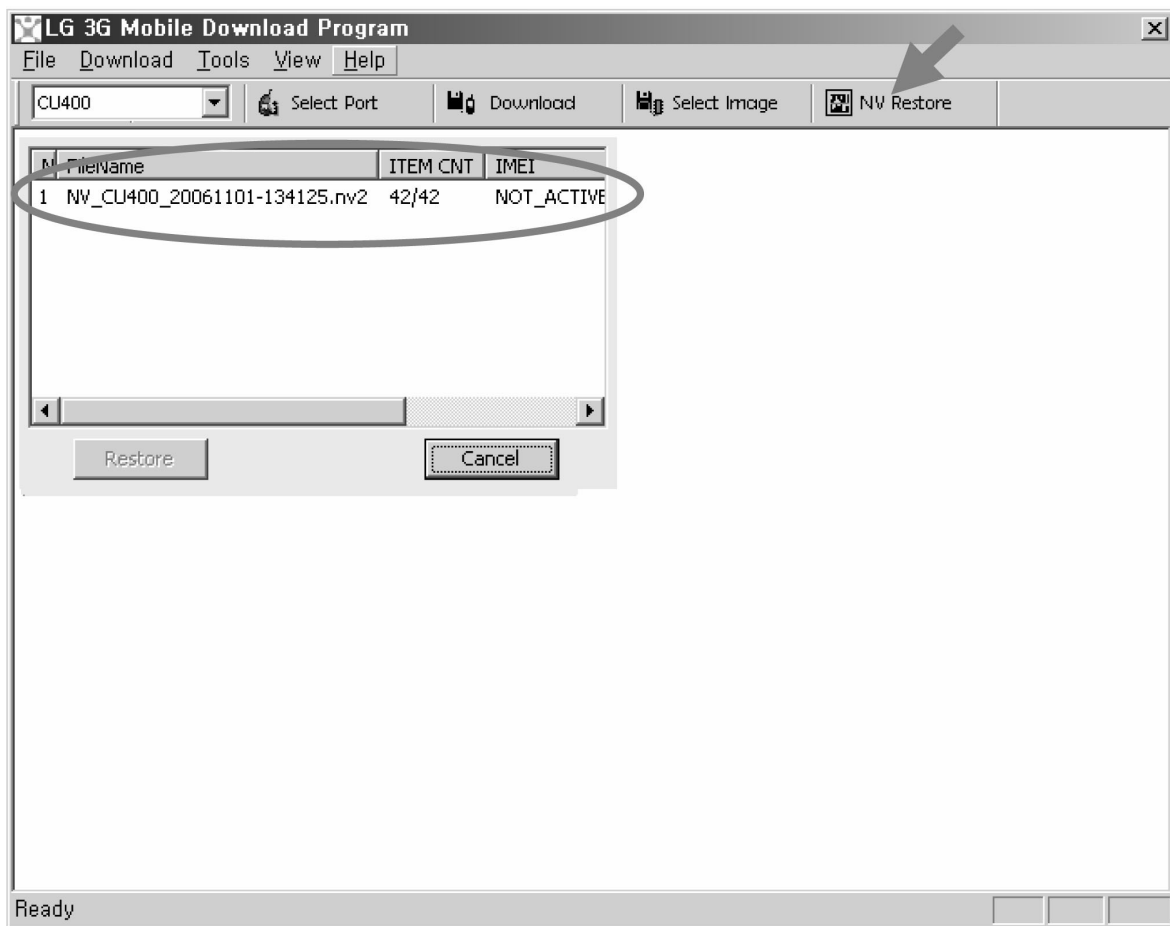
→ Click on 'Cancel'.



5. DOWNLOAD

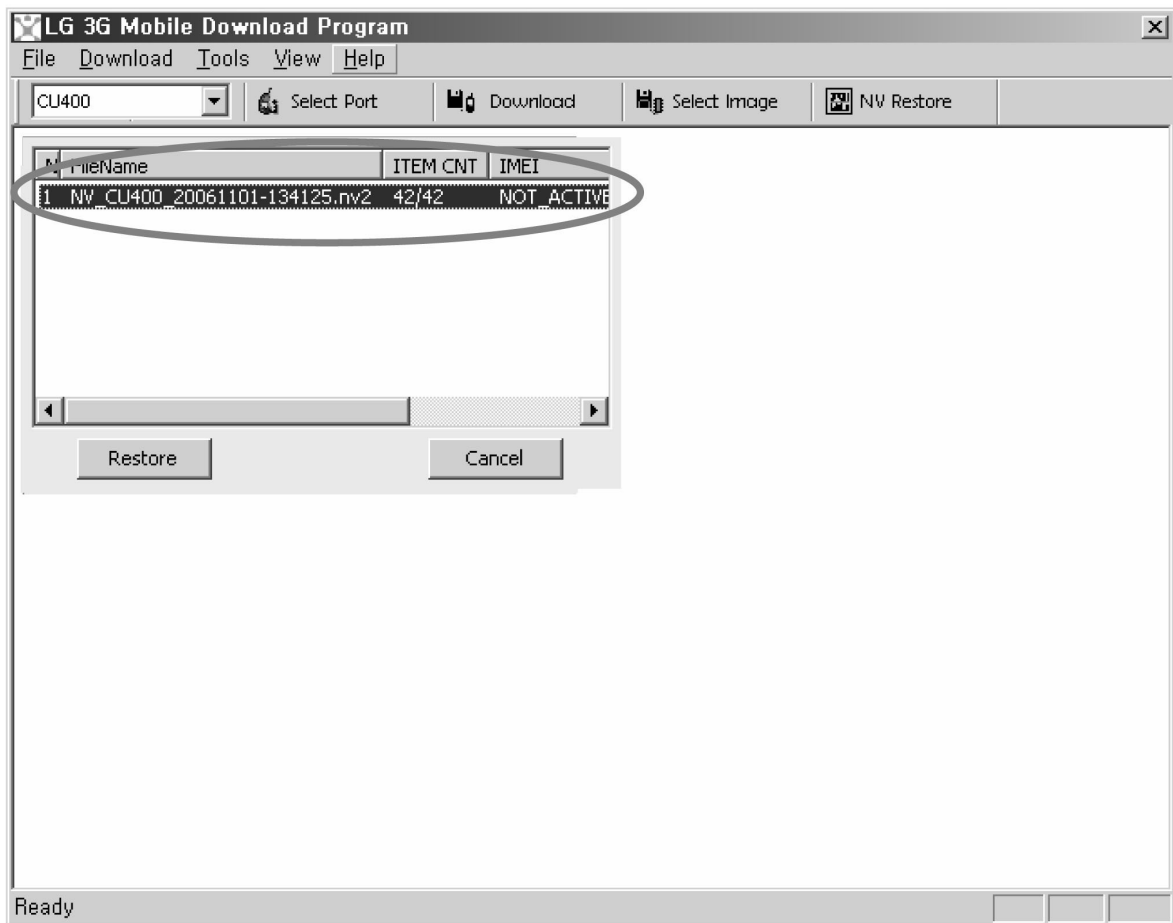
→ Click on 'NV Restore' then several NV Backup files(*.nv2) are shown.

★ The files are saved every NV Backup. The name is based on the time when NV Backup is done.)



5. DOWNLOAD

→ Select the proper file and click on 'Restore'.



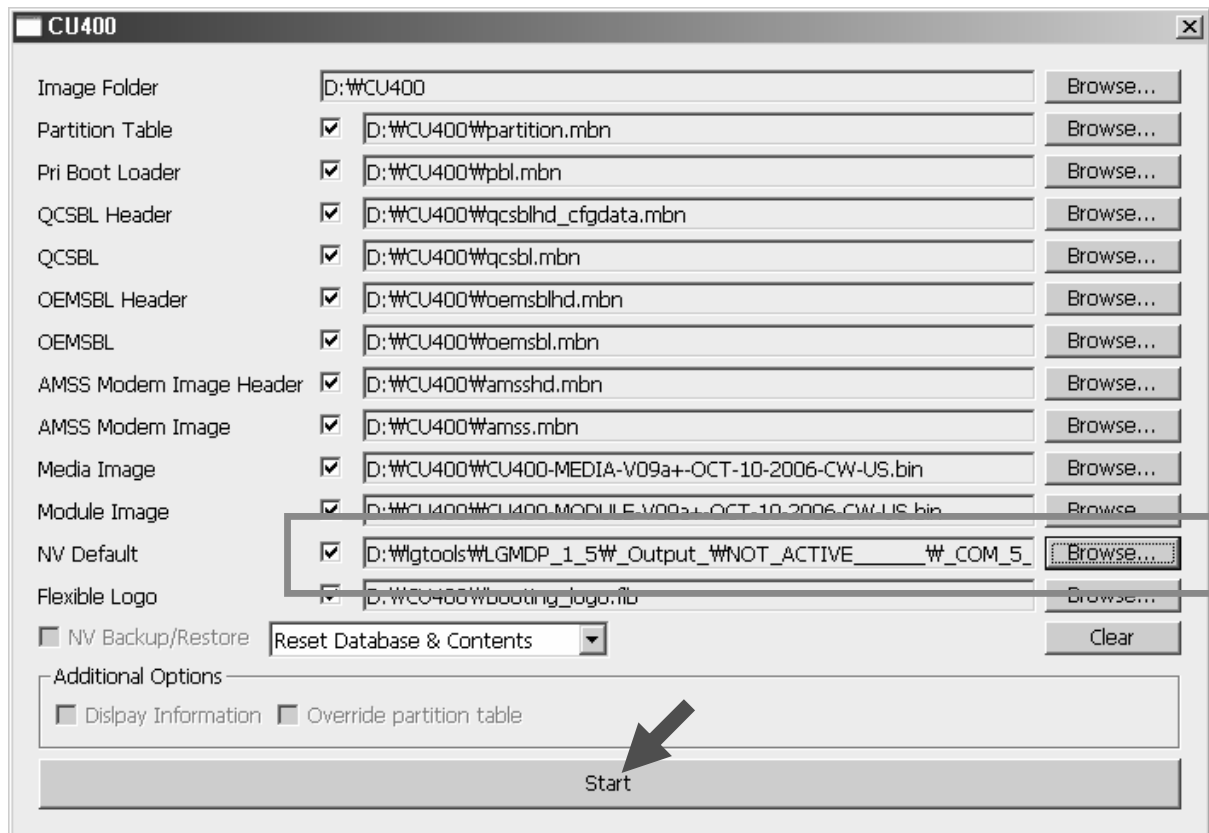
5. DOWNLOAD

→ If you want image download and NV backup file restore at once, use the NV Default function.

The screenshot shows the 'CU575' download configuration window. It contains a list of items to be downloaded, each with a checkbox and a file path. The 'NV Default' checkbox is unchecked, and a black arrow points to its 'Browse...' button. The 'NV Backup/Restore' checkbox is checked, and the 'Reset Database & Contents' dropdown is visible. The 'Additional Options' section has a 'Display Information' checkbox. At the bottom are 'Start' and 'DZ' buttons.

| Item | Checked | File Path | Action |
|--|-------------------------------------|---|-----------|
| Image Folder | | D:\WCU575\build\Wms\Wbin\WCU570FR | Browse... |
| Partition Table | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\partition.mbn | Browse... |
| QCSBL Header | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\qcsblhd_cfgdata.mbn | Browse... |
| QCSBL | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\qcsbl.mbn | Browse... |
| OEMSBL Header | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\woemsblhd.mbn | Browse... |
| OEMSBL | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\woemsbl.mbn | Browse... |
| AMSS Modem Image Header | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\wamsshd.mbn | Browse... |
| AMSS Modem Image | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\wamss.mbn | Browse... |
| Media Image | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\WCU575-MEDIA-V08h-pre2-MAR- | Browse... |
| Module Image | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\WCU575-MODULE-V08h-pre2-MA | Browse... |
| NV Default | <input type="checkbox"/> | | Browse... |
| Flexible Logo | <input checked="" type="checkbox"/> | D:\WCU575\build\Wms\Wbin\WCU570FR\wbooting_logo.flb | Browse... |
| NV Backup/Restore | <input checked="" type="checkbox"/> | Reset Database & Contents | Clear |
| Additional Options | | | |
| <input type="checkbox"/> Display Information | | | |
| Start | | | DZ |

5. DOWNLOAD



5. DOWNLOAD

5.4 Caution

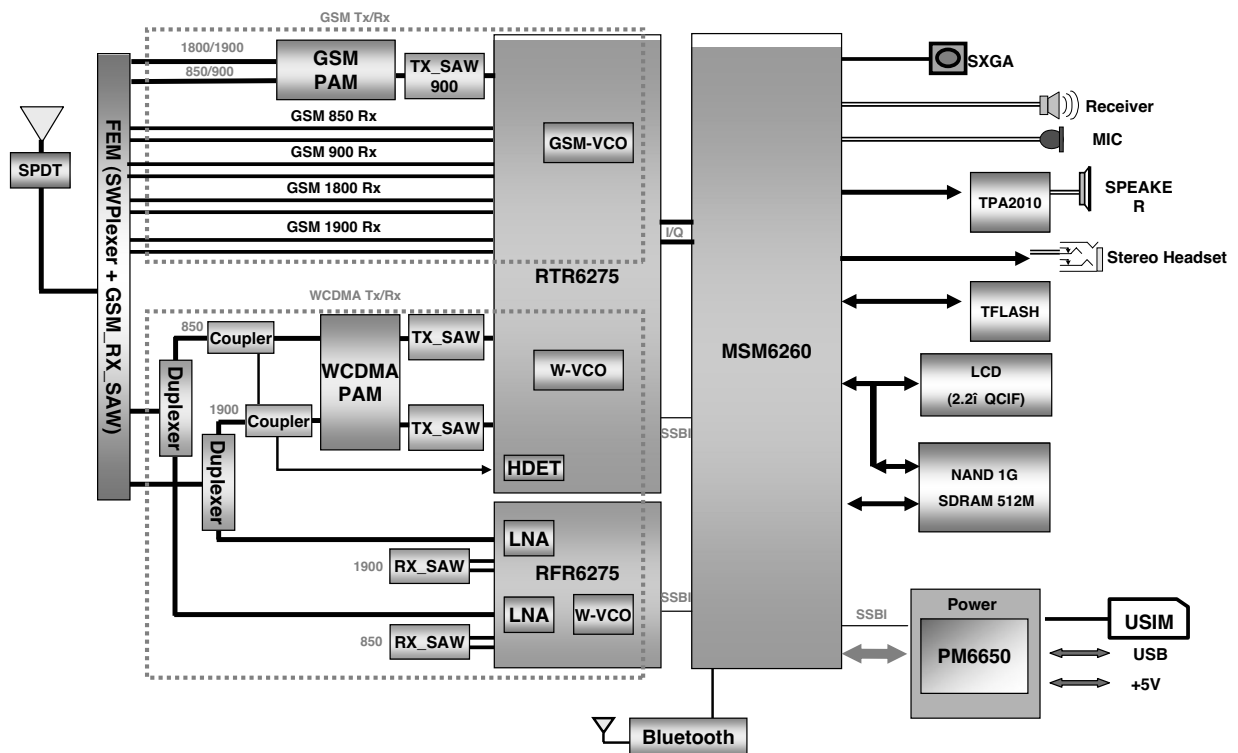
- 1) Multi-downloading using the USB hub is not recommendable.
- 2) If you see the message 'cal mode' after 'completing download', you must do NV restore and image (media and module) download.
- 3) In emergency mode, you can not download the media and module image. So if you want download media and module image, connect the phone normal mode after emergency mode download, and then you can do it.
- 4) The NV data saved at LGMDP folder like this.



- 5) Recommended that the Module and Media Image have to be downloaded at the same time.
- 6) Erase EFS option will erase everything (media, module, nv items, and user data) in the EFS area.

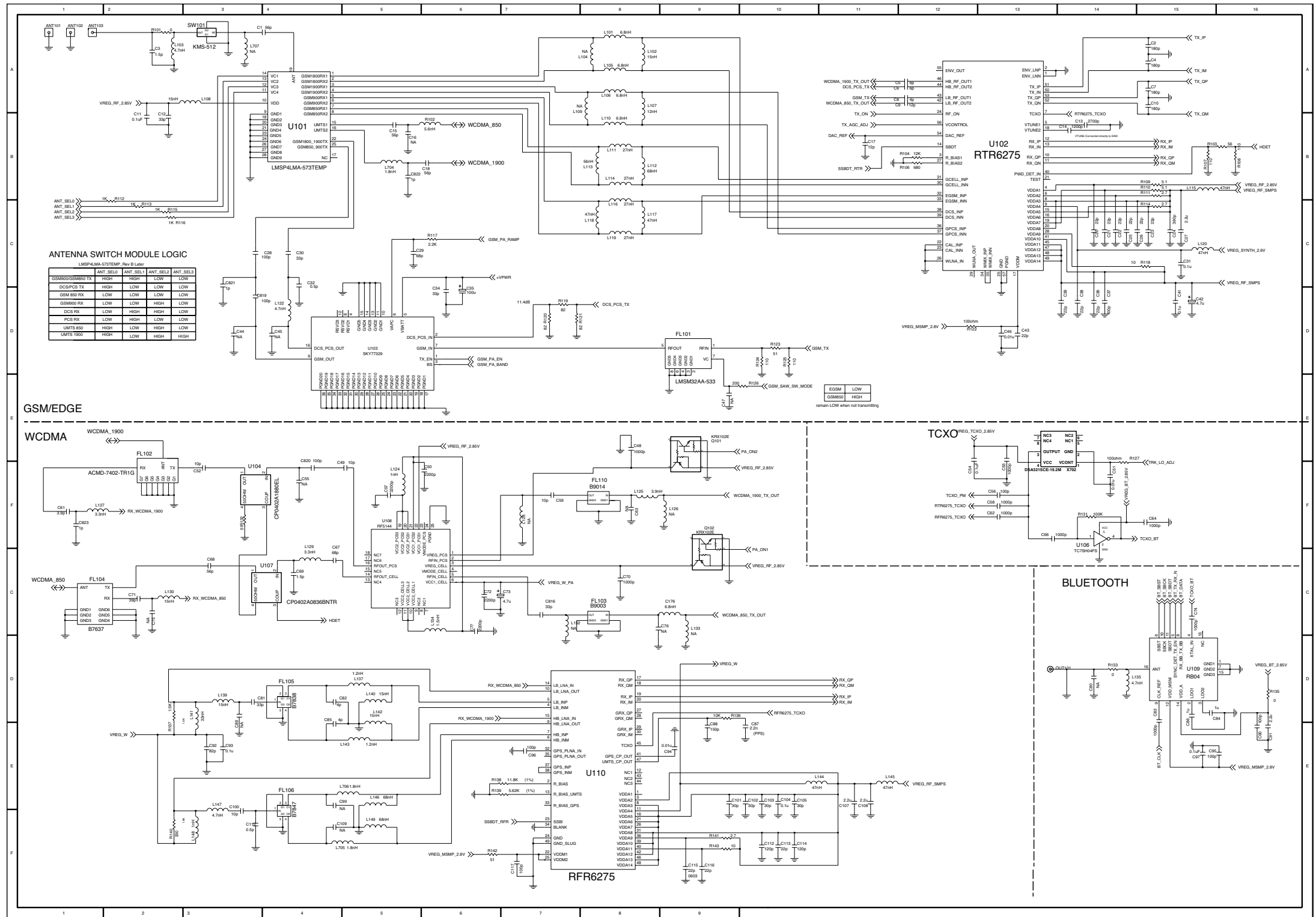
6. BLOCK DIAGRAM

6.1 CU575 Block Diagram

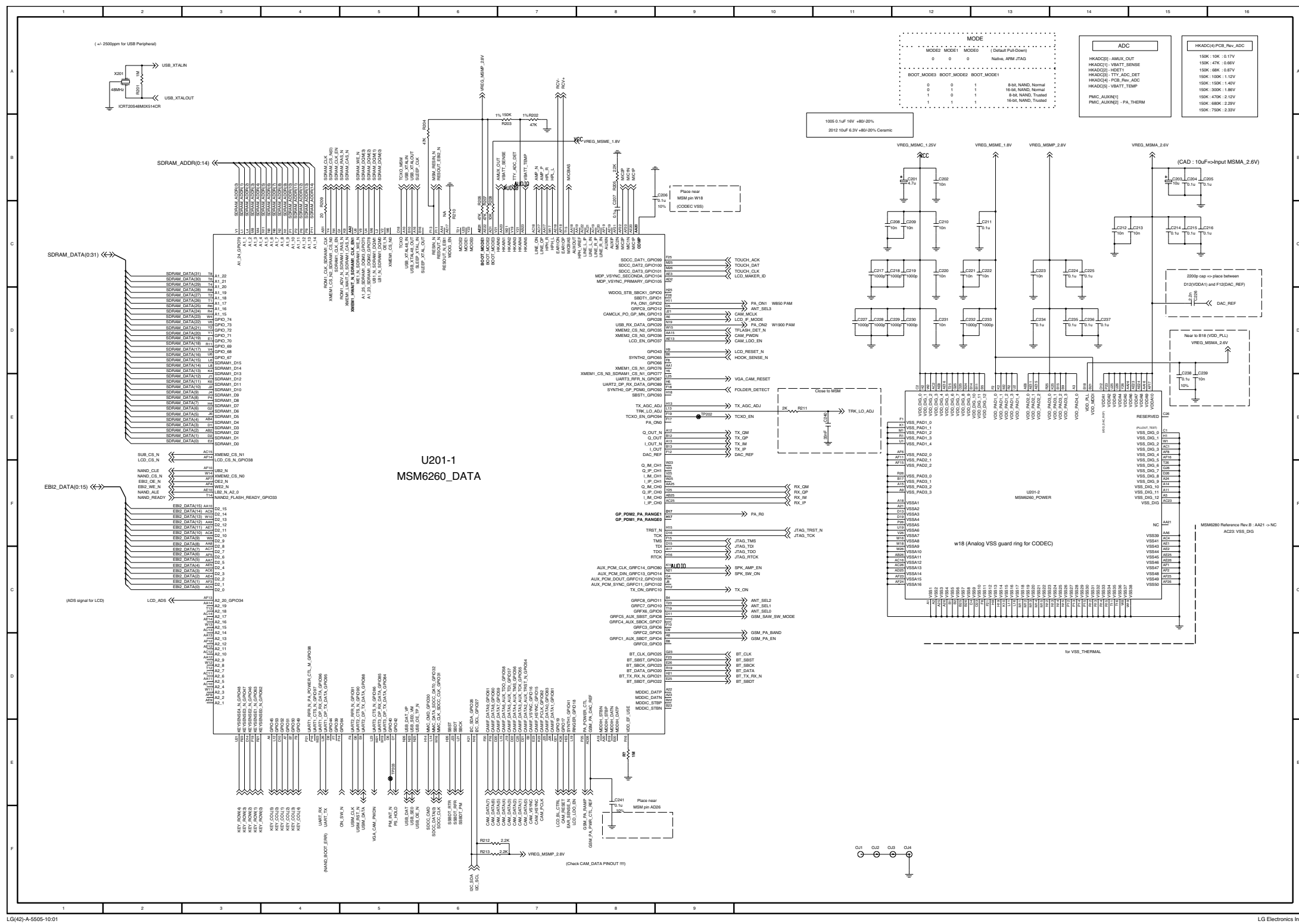




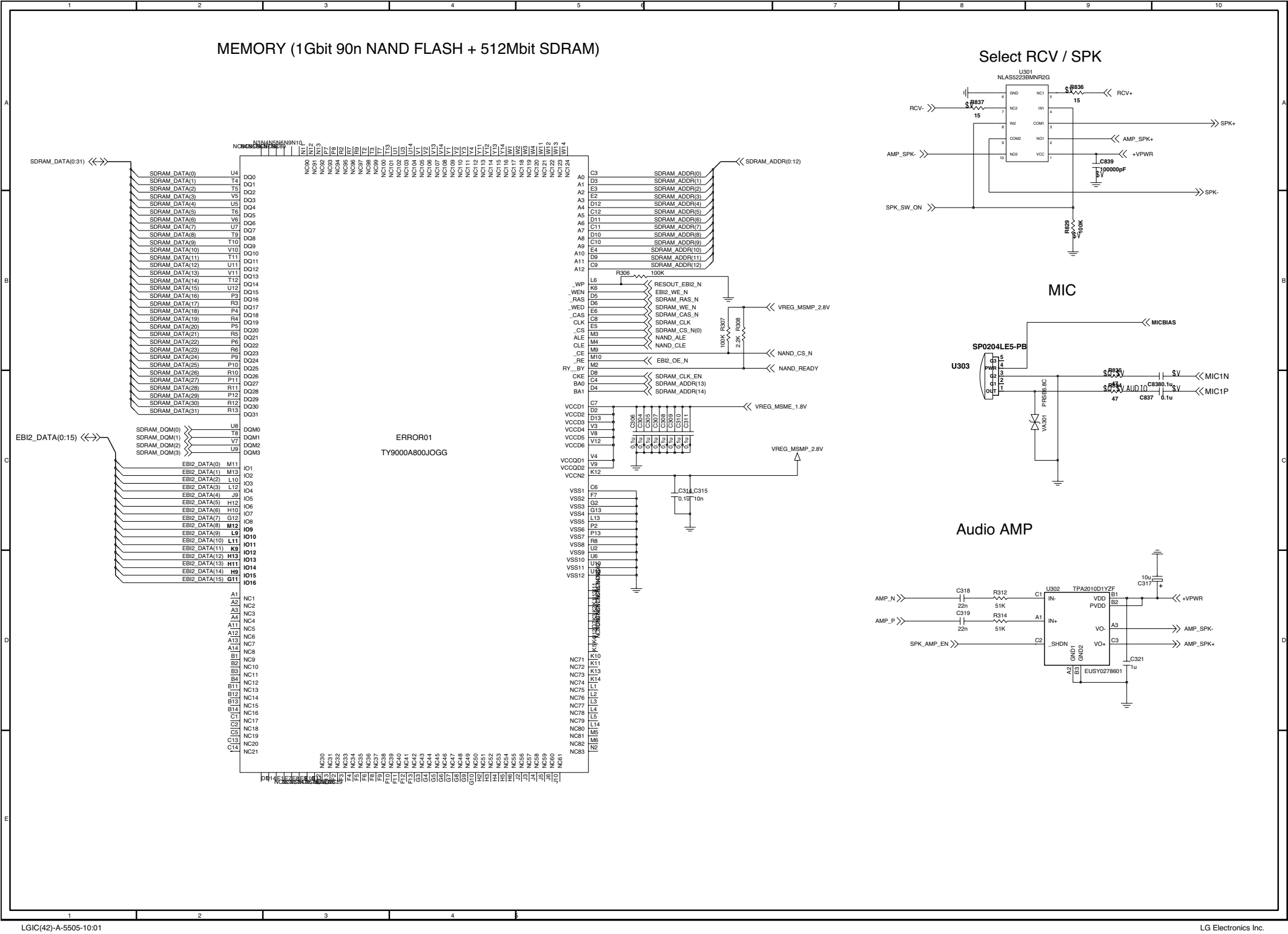
7. CIRCUIT DIAGRAM



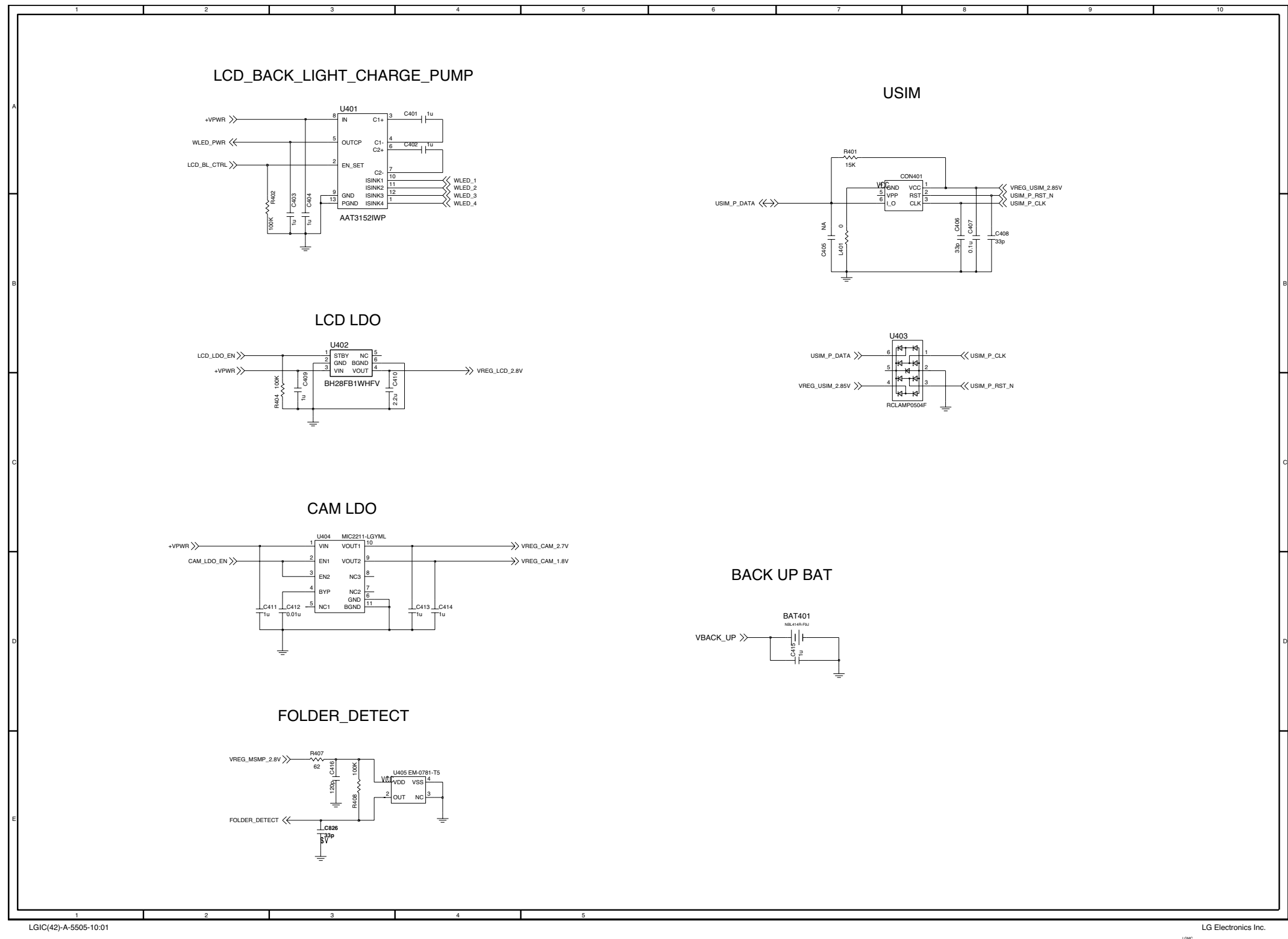
7. CIRCUIT DIAGRAM



7. CIRCUIT DIAGRAM



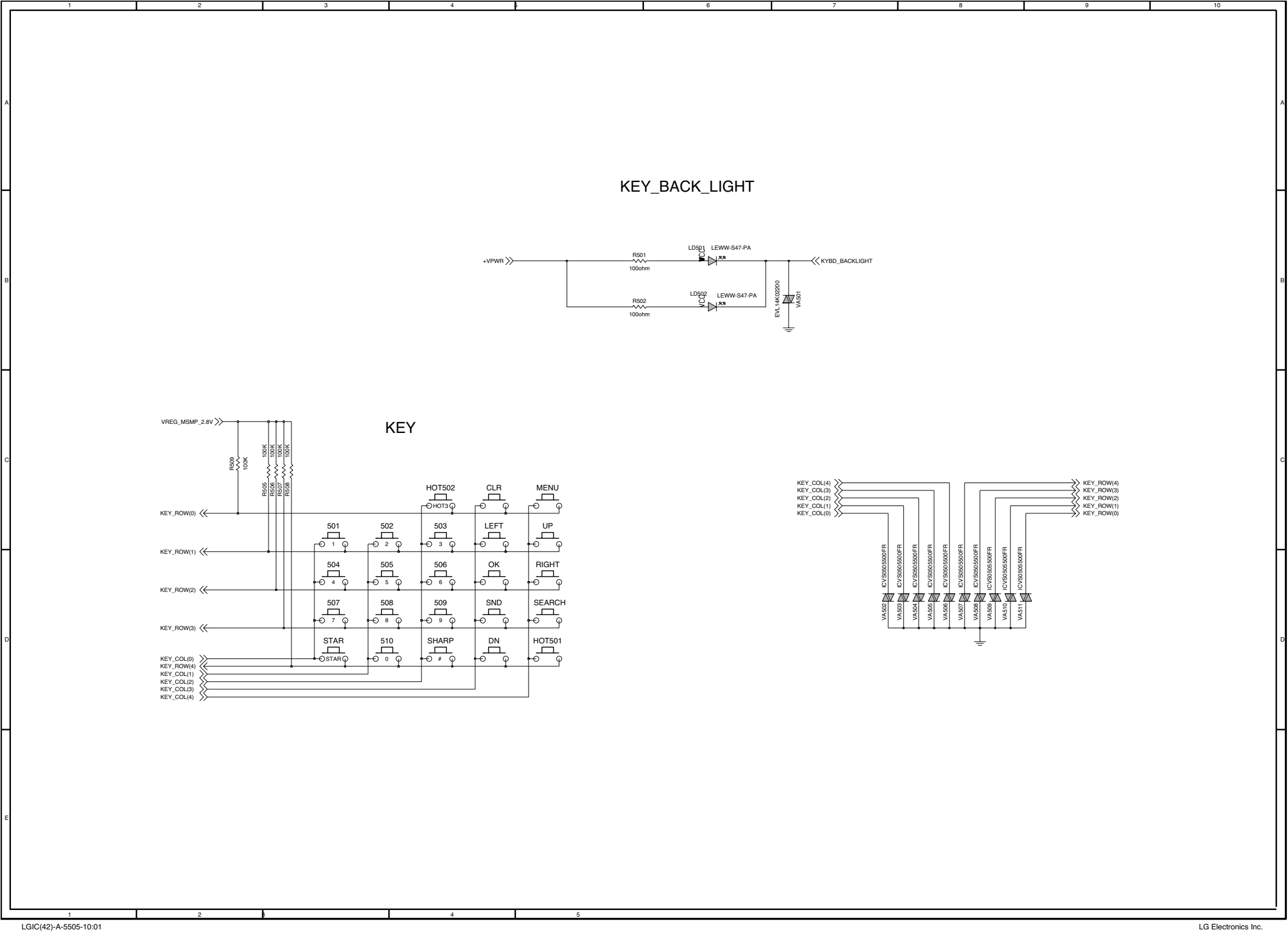
7. CIRCUIT DIAGRAM



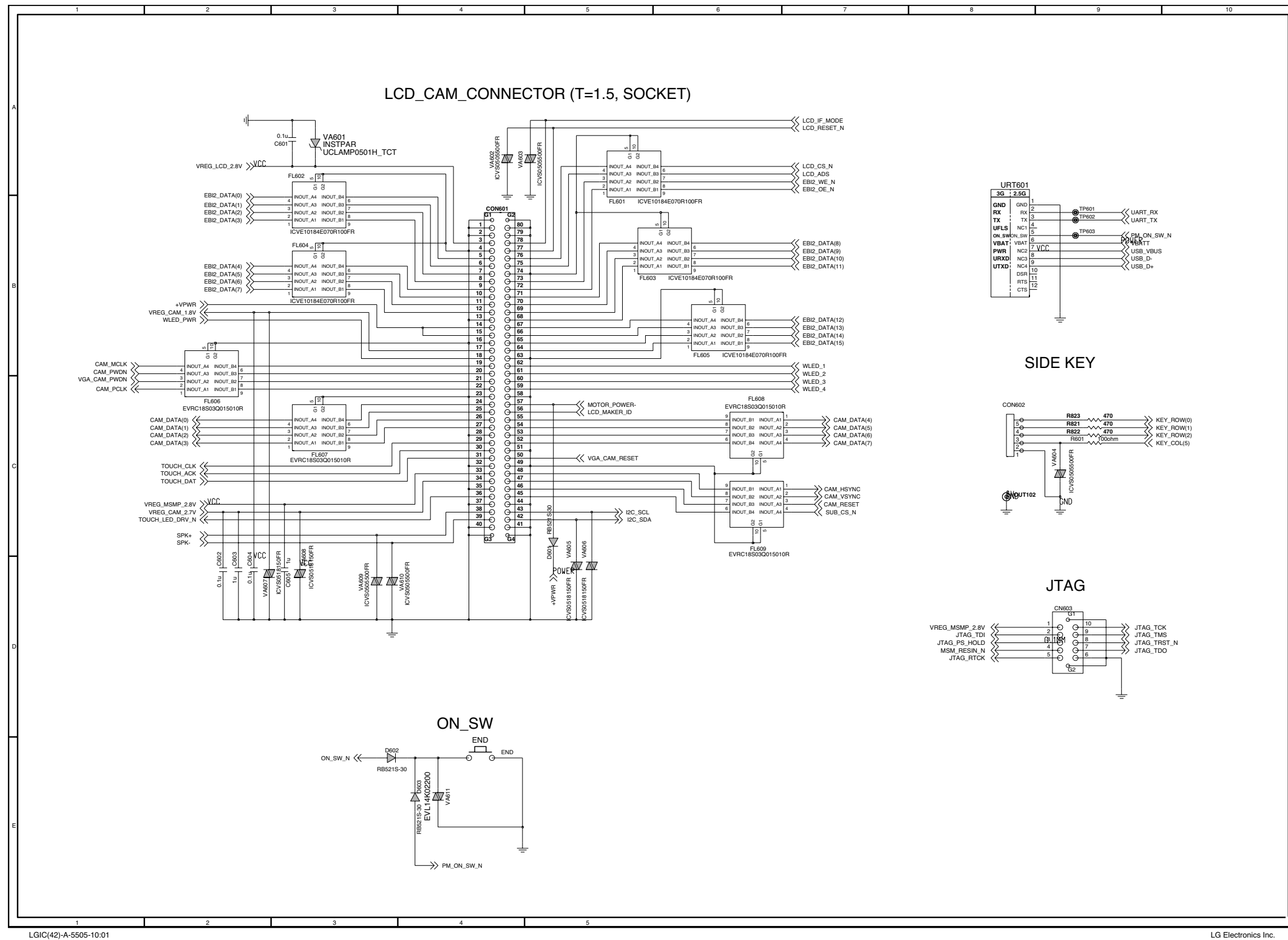
LGIC(42)-A-5505-10:01

LG Electronics Inc.

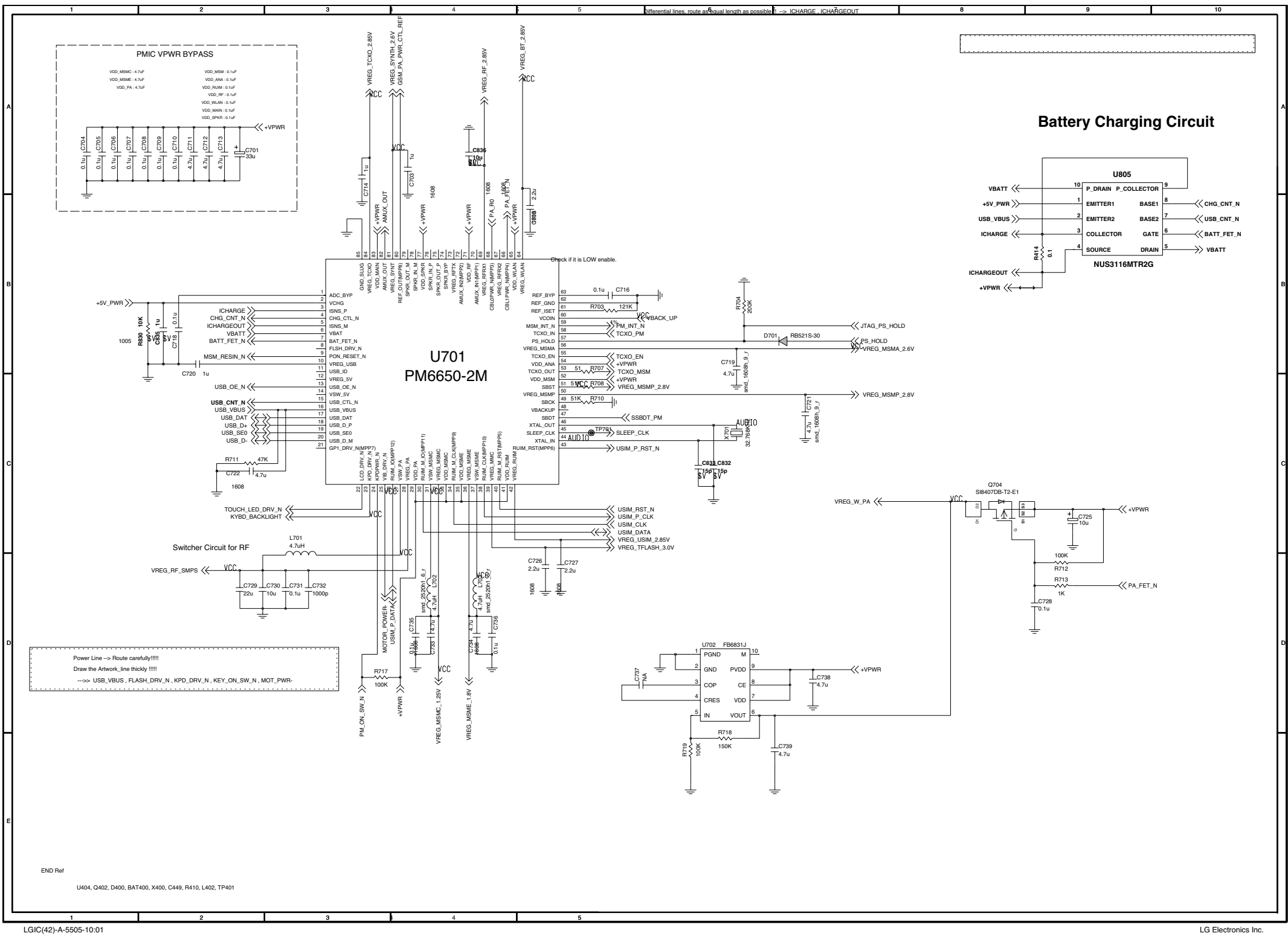
7. CIRCUIT DIAGRAM



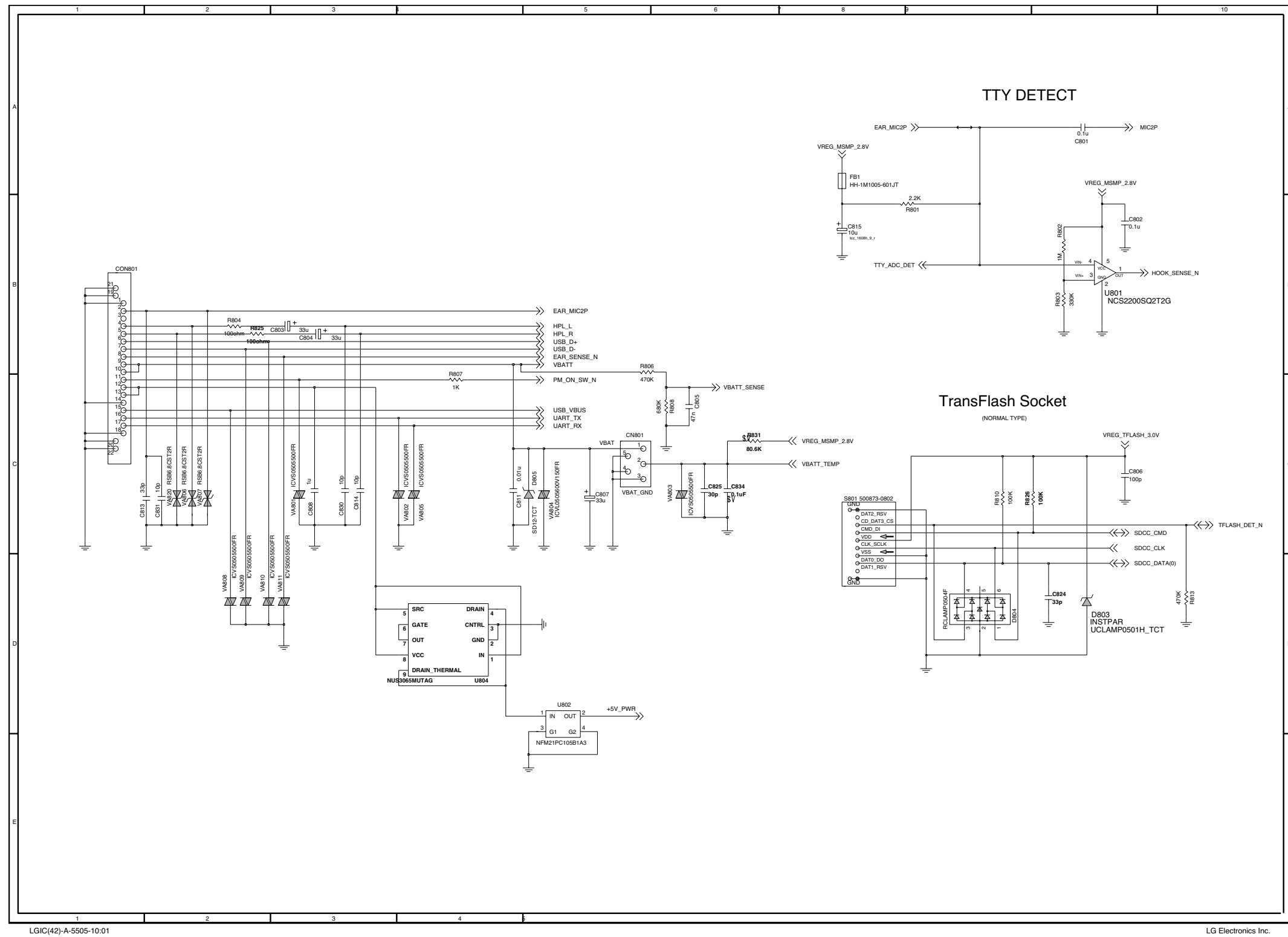
7. CIRCUIT DIAGRAM



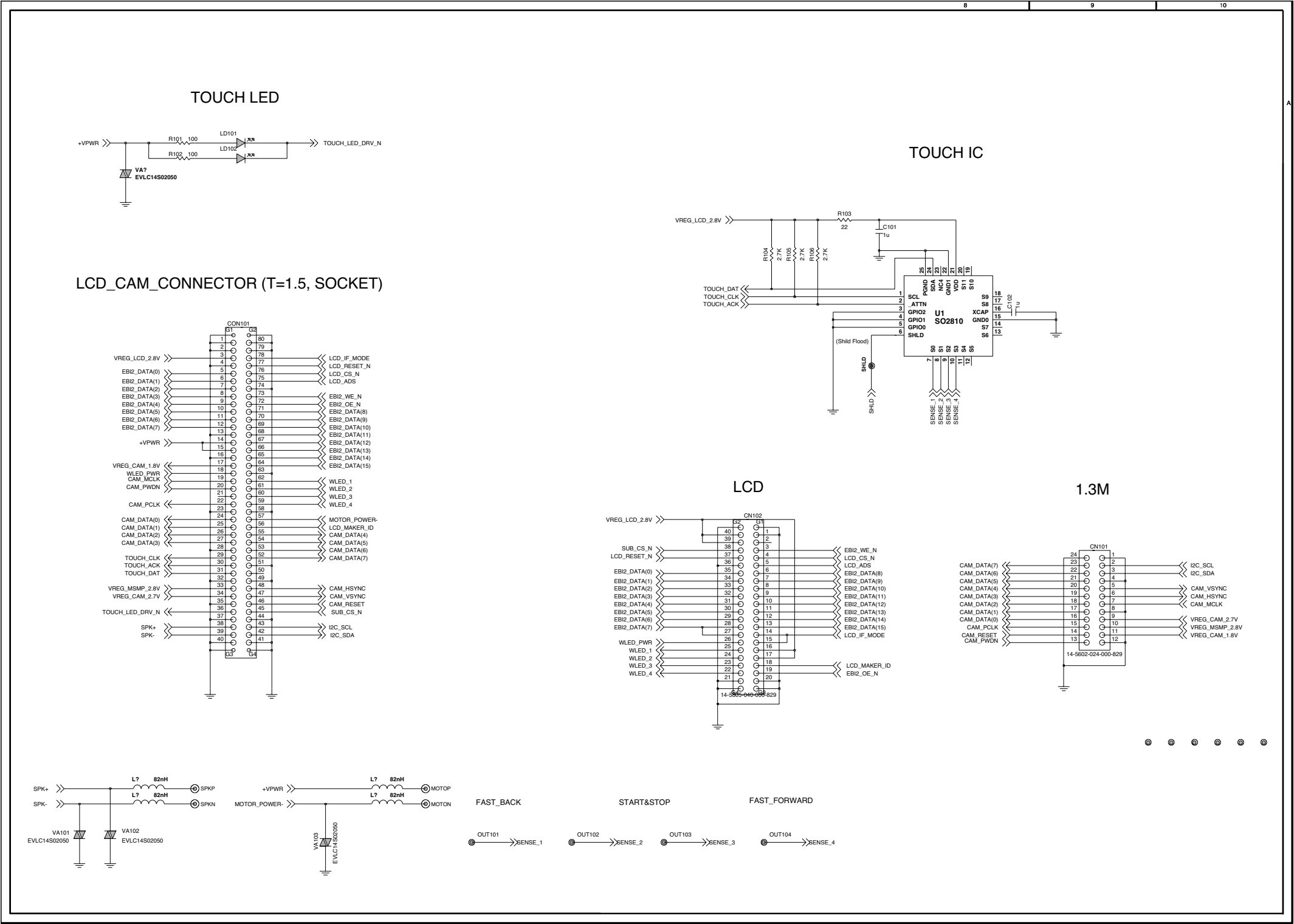
7. CIRCUIT DIAGRAM



7. CIRCUIT DIAGRAM



7. CIRCUIT DIAGRAM



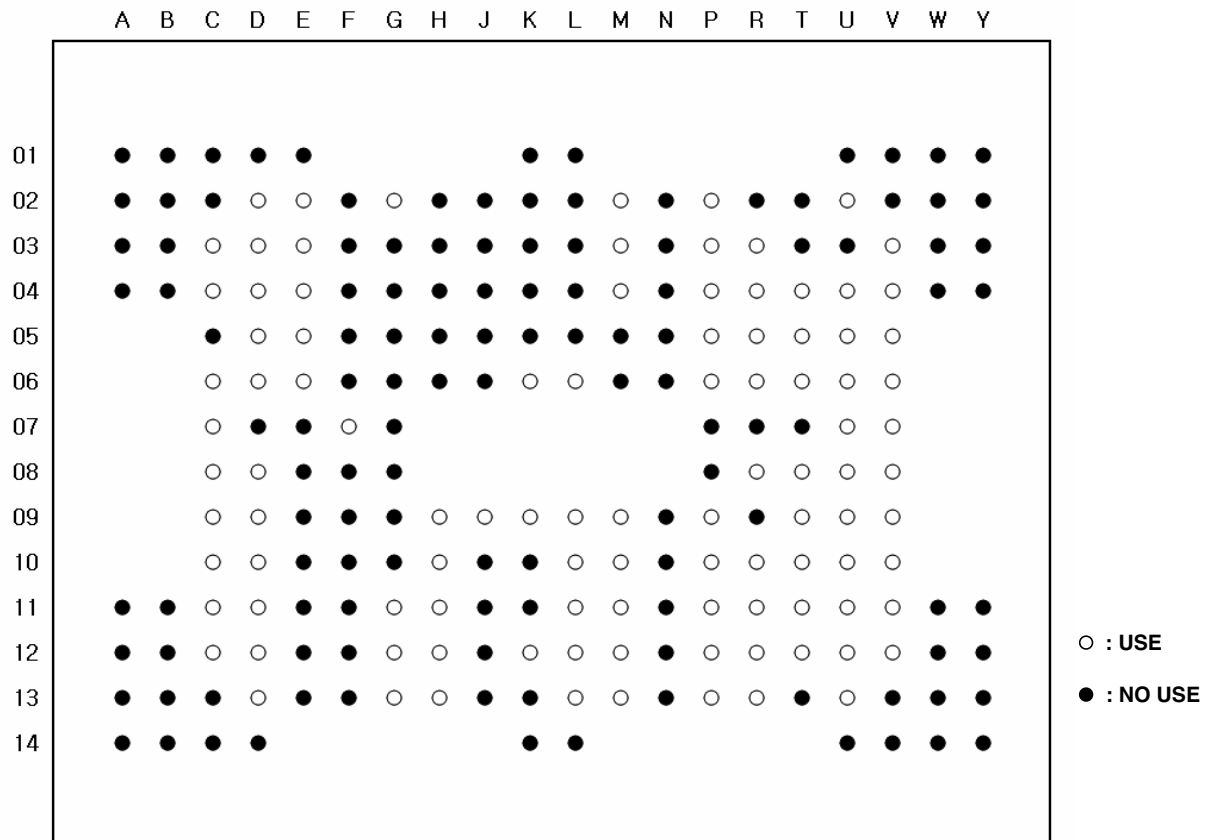
8. BGA

| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | T | U | V | W | Y | AA | AB | AC | AD | AE | AF |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 26 | ○ | ○ | ○ | ○ | ○ | ● | ○ | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 25 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 24 | ○ | ○ | | | | | | | | | | | | | | | | | | | | | | | ○ | ○ |
| 23 | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ● | ○ | ○ | ○ | | ○ | ○ |
| 22 | ● | ● | ○ | | | | | | | | | | | | | | | | | | | | ● | | ○ | ○ |
| 21 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 20 | ● | ● | ○ | ○ | | | | | | | | | | | | | | | | | ○ | ○ | ○ | ○ | ○ | ○ |
| 19 | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 18 | ○ | ○ | ○ | ○ | ○ | | ○ | ○ | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 17 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 16 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 15 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 14 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 13 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 12 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 11 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 10 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 09 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 08 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 07 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 06 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 05 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 04 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | | | | | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ |
| 03 | ○ | ○ | | | | | | | | | | | | | | | | | | | | | | | ○ | ○ |
| 02 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 01 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

○ : USE
● : NO USE

U201-1, U201-2 : MSM 6260
(EUSY0334501)

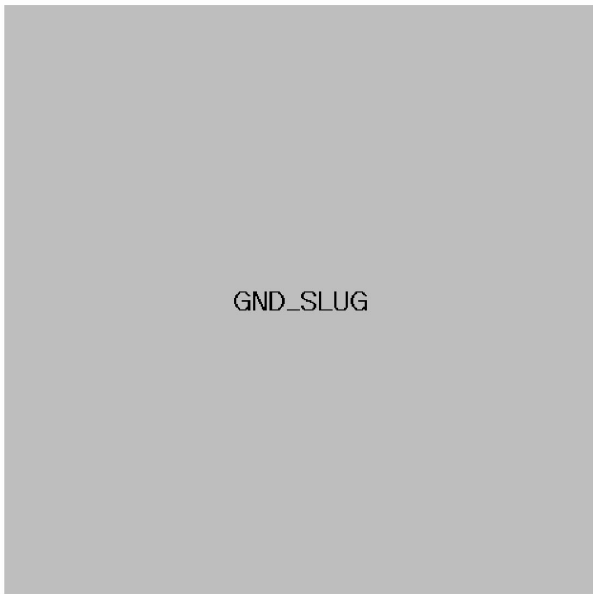
8. BGA



U806 : TY9000A800JOGG
(EUSY0336901)

* U806 is ERROR01 in circuit diagram (page 3).

8. BGA

| | | | | | | | | | | | | | | | | | | | | | | |
|----|----|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | | 83 | | 81 | | 79 | | 77 | | 75 | | 73 | | 71 | | 69 | | 67 | | 65 | | 63 |
| | 84 | | 82 | | 80 | | 78 | | 76 | | 74 | | 72 | | 70 | | 68 | | 66 | | 64 | |
| 2 | |  | | | | | | | | | | | | | | | | | | | 62 | |
| | 3 | | | | | | | | | | | | | | | | | | | | 61 | |
| 4 | | | | | | | | | | | | | | | | | | | | | 60 | |
| | 5 | | | | | | | | | | | | | | | | | | | | 59 | |
| 6 | | | | | | | | | | | | | | | | | | | | | 58 | |
| | 7 | | | | | | | | | | | | | | | | | | | | 57 | |
| 8 | | | | | | | | | | | | | | | | | | | | | 56 | |
| | 9 | | | | | | | | | | | | | | | | | | | | 55 | |
| 10 | | | | | | | | | | | | | | | | | | | | | 54 | |
| | 11 | | | | | | | | | | | | | | | | | | | | 53 | |
| 12 | | | | | | | | | | | | | | | | | | | | | 52 | |
| | 13 | | | | | | | | | | | | | | | | | | | | 51 | |
| 14 | | | | | | | | | | | | | | | | | | | | | 50 | |
| | 15 | | | | | | | | | | | | | | | | | | | | 49 | |
| 16 | | | | | | | | | | | | | | | | | | | | | 48 | |
| | 17 | | | | | | | | | | | | | | | | | | | | 47 | |
| 18 | | | | | | | | | | | | | | | | | | | | | 46 | |
| | 19 | | | | | | | | | | | | | | | | | | | | 45 | |
| 20 | | | | | | | | | | | | | | | | | | | | | 44 | |
| | 22 | | 24 | | 26 | | 28 | | 30 | | 32 | | 34 | | 36 | | 38 | | 40 | | 42 | |
| 21 | | 23 | | 25 | | 27 | | 29 | | 31 | | 33 | | 35 | | 37 | | 39 | | 41 | | 43 |

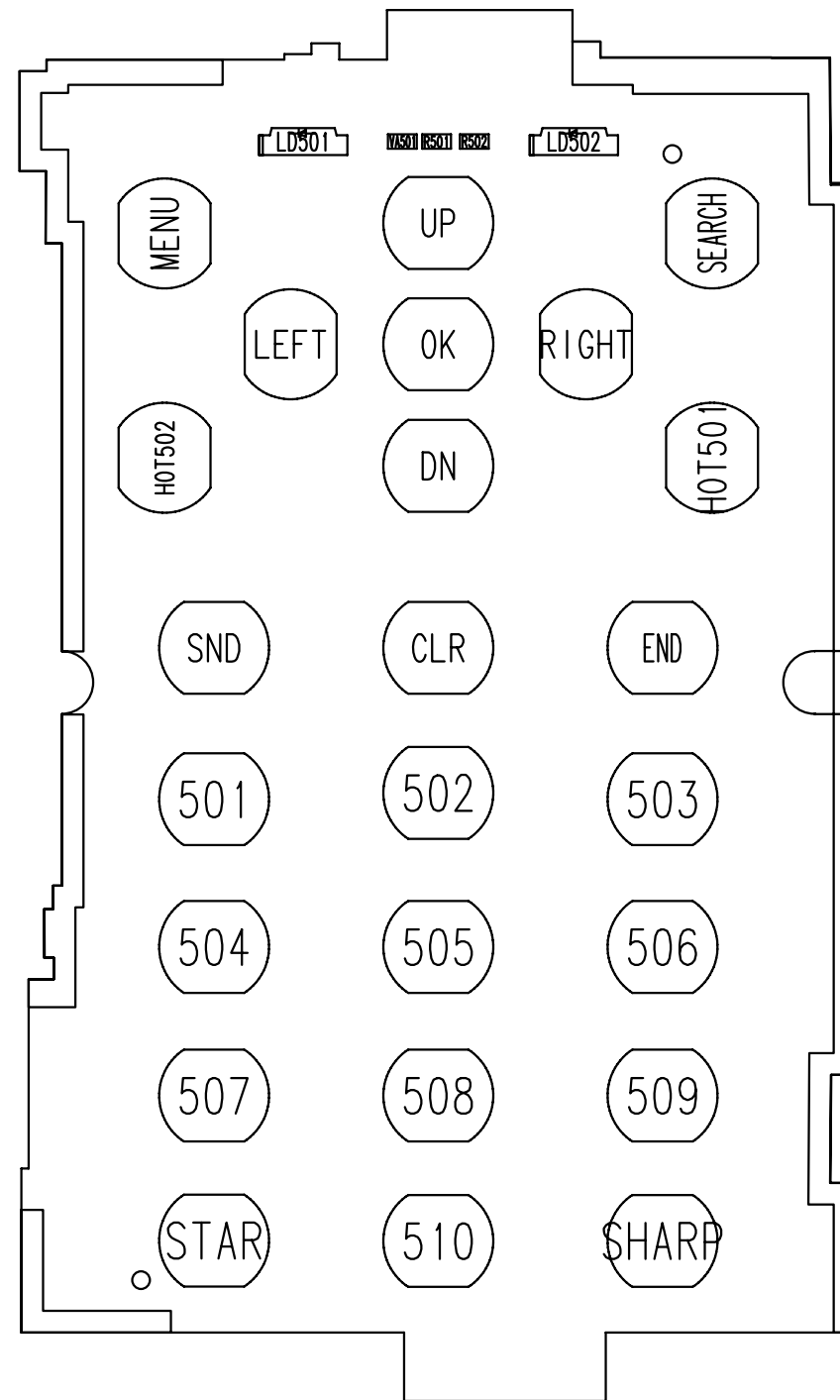
N : USE

N : NO USE

UU701 : PM6650-2M
(EUSY0306302)

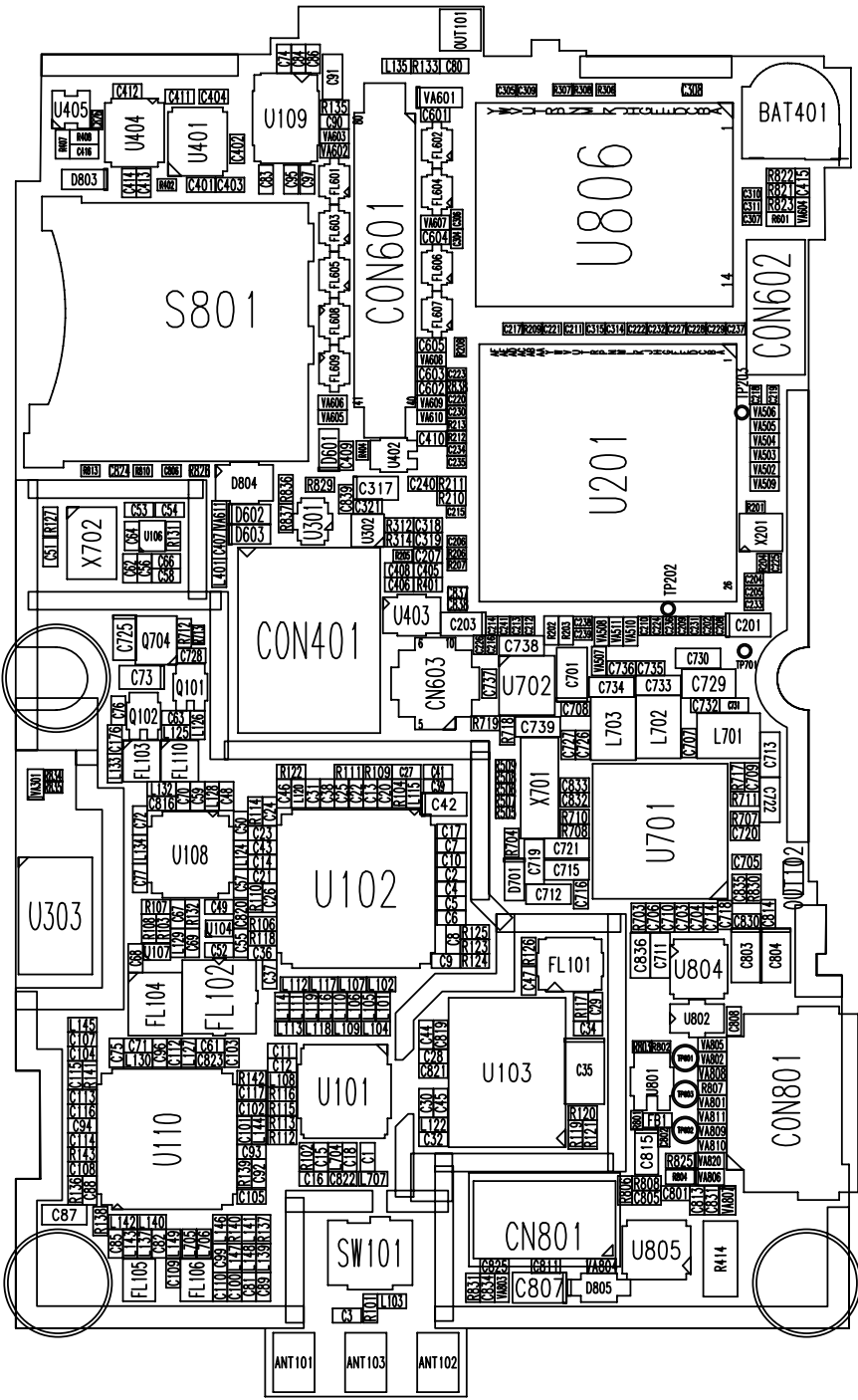


9. PCB LAYOUT



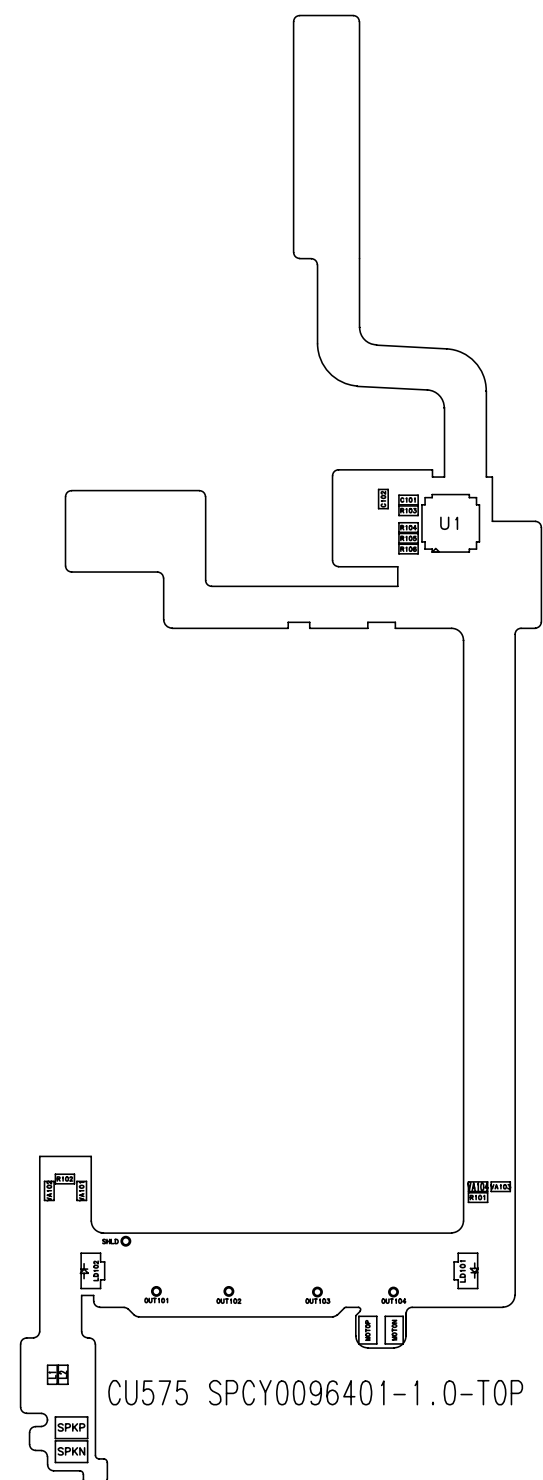
CU575-MAIN-SPFY0144201-1.0-TOP

9. PCB LAYOUT

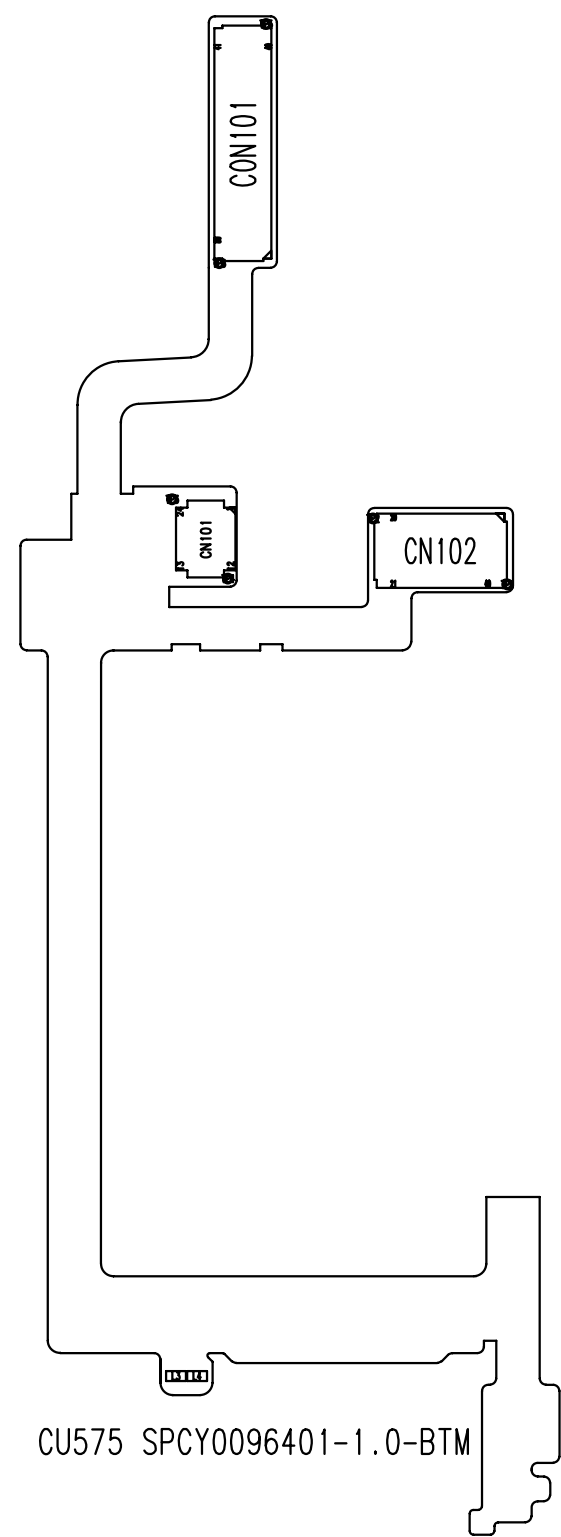


CU575-MAIN-SPFY0144201-1.0-BTM

9. PCB LAYOUT



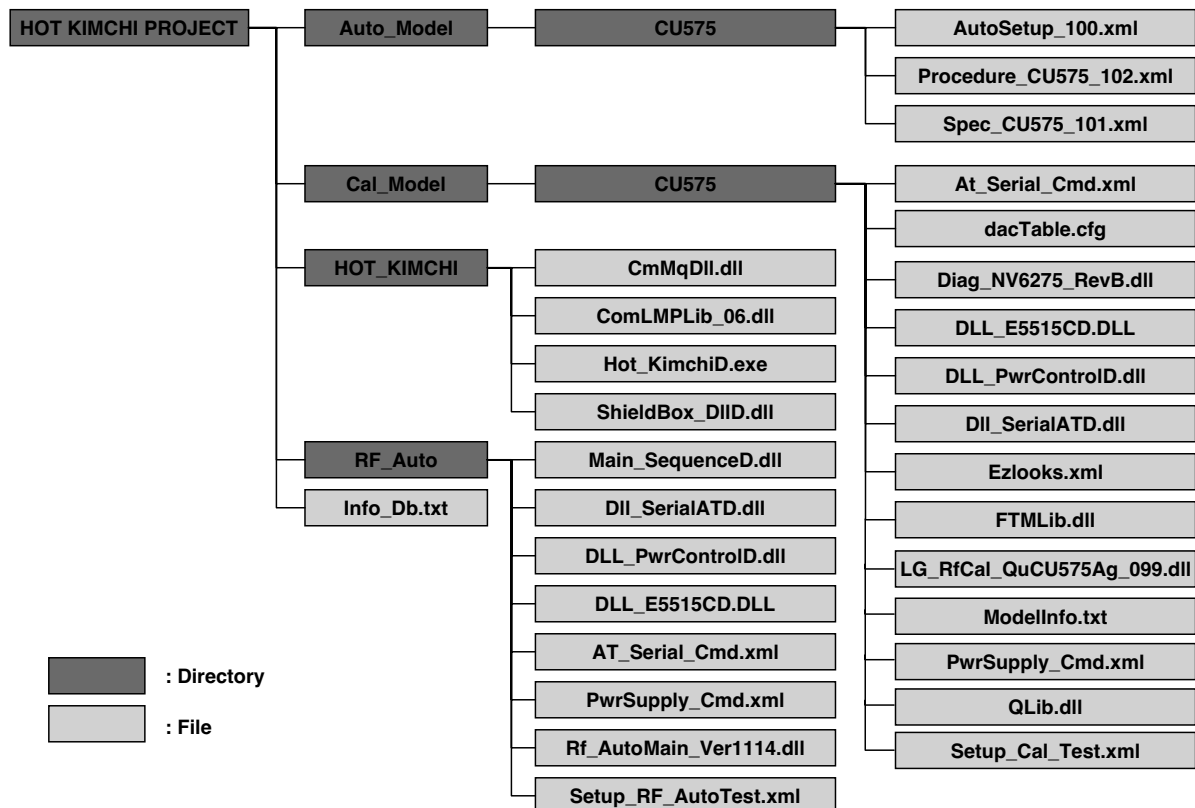
9. PCB LAYOUT



10. Calibration & RF Auto Test Program

10.1 Configuration of HOT KIMCHI

10.1.1 Configuration of directory



10. Calibration & RF Auto Test Program

10.1.2 Setup file (Info_Db.txt)

```
/*cal*/[Default]=[CU575]
①/*cal*/②[CU575]=③[..\Cal Mode\CU575\LG_RfCal_Qu_CU575_Ag_099.dll]
④/*auto*/[CU575]=[..\RF Auto\Rf_AutoMain_Ver1114.dll]

[ezlooks]=[off]
[batcal]=[off]
[svc]=[off]
[standalone]=[off]
[tescom]=[off]
⑤[process]=[cal]
⑥[CU575]=⑦[..\Auto_Mode\CU400\Procedure_CU575_102.xml...\Auto_Mode\CU575
\Spec_CU575_101.xml...\Auto_Mode\CU400\AutoSetup_100.xml]
```

'on' or 'off'. (use only lower case)

'auto' or 'cal'. (use only lower case)

- 1: Indication of 'cal process' or 'auto process'
- 2: Model name which is displayed on Hot Kimchi program
- 3: Relative path of Main Sequence dll file from Hot_KimchiD.exe
- 4: You can change this as 'on' or 'off'(should be in lower case; on, off)
- 5: You can change this as 'auto' or 'cal'(should be in lower case; on, off)
- 6: Auto model name
- 7: Relative path of auto model procedure, spec, setting file from Hot_KimchiD.exe

10. Calibration & RF Auto Test Program

10.1.3 Items of setup file

[ezlooks] => The yes or no for using ezlooks

Domestic: on, Overseas: off

[batcal] => The yes or no for using battery calibration

[svc] => The yes or no for using HOT KIMCHI at service center

Domestic: off, Service Center: on

[standalone] => Overseas factory or Service Center: on, Domestic: off

[tescom] => The yes or no for using TESCOM shield box

[process] => selection of the process (auto or cal)

[CU400] => procedure, spec., setup file name (only for auto)

10. Calibration & RF Auto Test Program

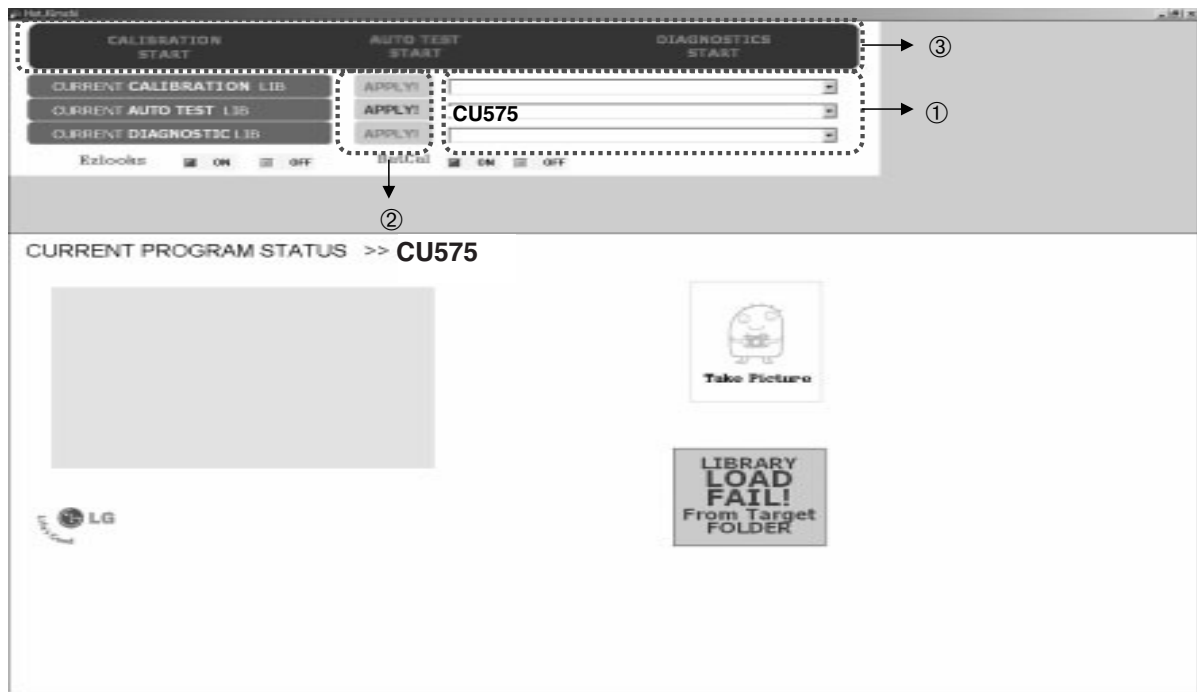
10.1.4 Example for setup file

| CAL Process | AUTO Process |
|---|--|
| Ex1) Service center [ezlooks]=[off] [batcal]=[off] [svc]=[on] [standalone]=[off] [tescom]=[off] [process]=[cal] | Ex1) Service center, Overseas factory, Repair [ezlooks]=[off] [batcal]=[off] [svc]=[off] [standalone]=[off] [tescom]=[off] [process]=[auto] |
| Ex2) Overseas factory or Repair [ezlooks]=[off] [batcal]=[on] [svc]=[off] [standalone]=[on] [tescom]=[off] [process]=[cal] | Ex2) Domestic factory [ezlooks]=[on] [batcal]=[off] [svc]=[off] [standalone]=[off] [tescom]=[off] [process]=[auto] |
| Ex3) Domestic factory [ezlooks]=[on] [batcal]=[on] [svc]=[off] [standalone]=[off] [tescom]=[off] [process]=[cal] | |

※ In case of using Tescom S/B, set [tescom]=[on].

10. Calibration & RF Auto Test Program

10.2 How to use HOT KIMCHI

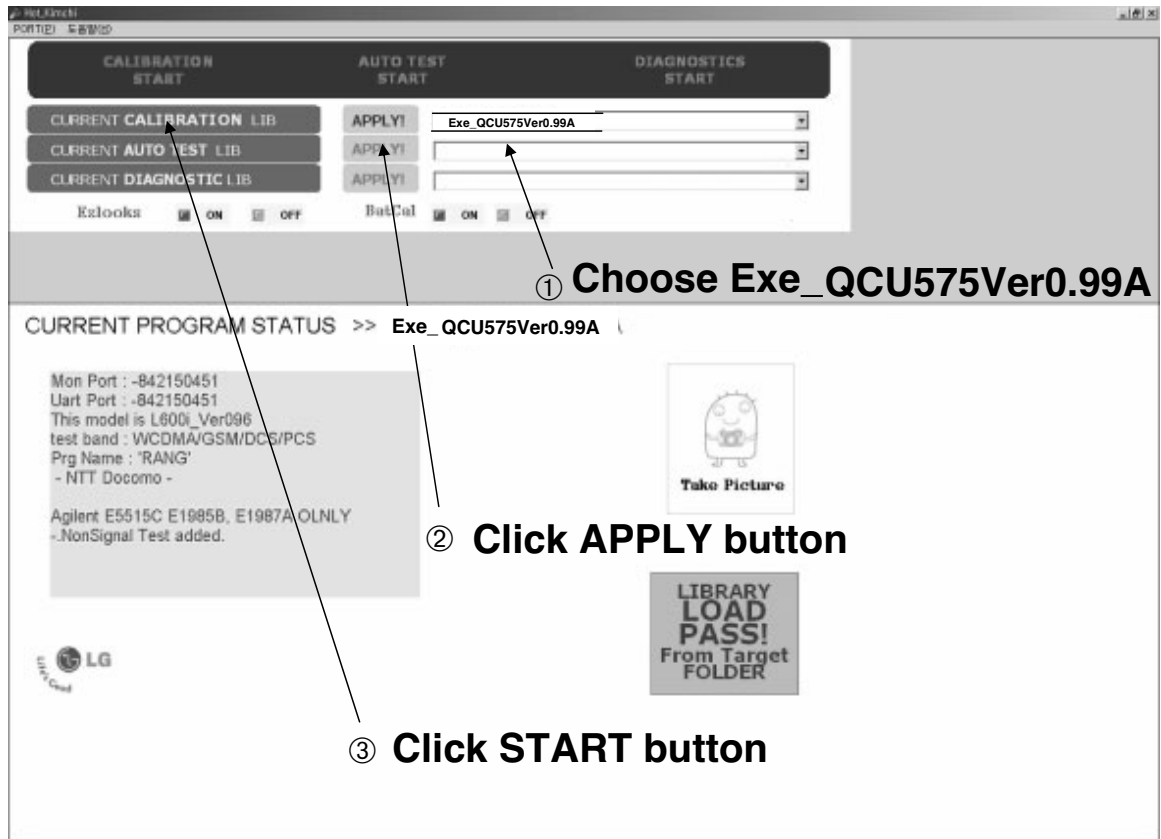


* Flow

1. Select the model name which you want
2. Click APPLY button to load the 'cal' or 'auto' lib file
3. Click START button to run the procedure which you want

10. Calibration & RF Auto Test Program

10.3 Example for using HOT KIMCHI



- CU575_Ver0.99A Calibration -

10. Calibration & RF Auto Test Program

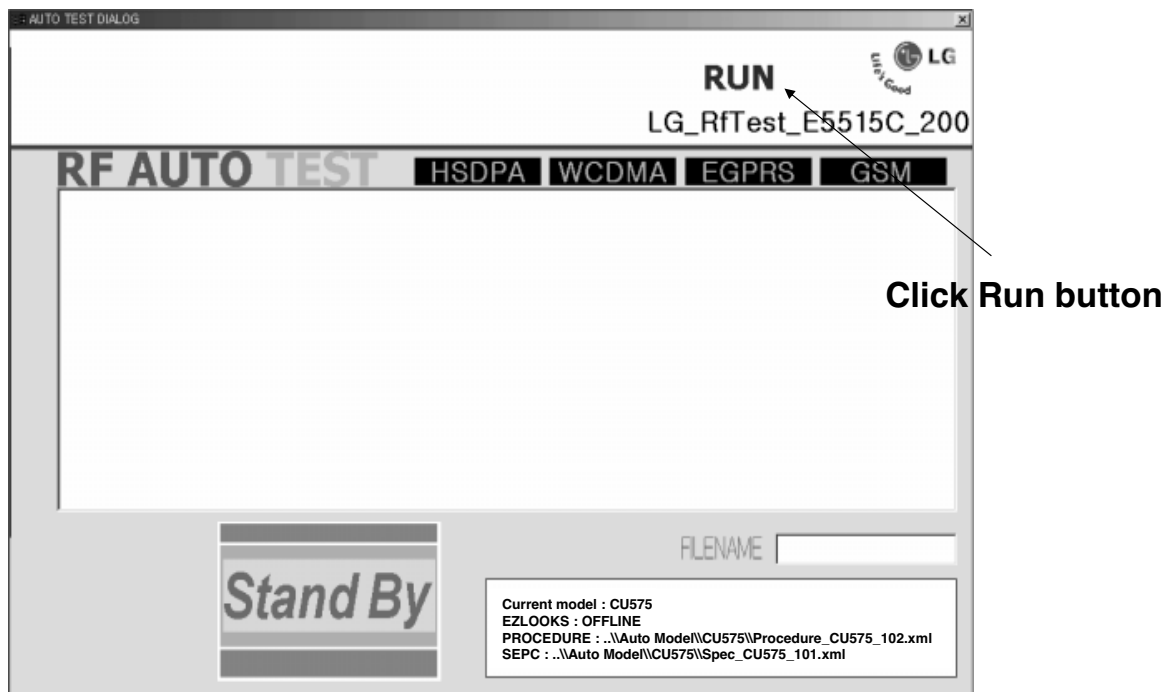
10.3.1 Example for RF Auto Test



Click START

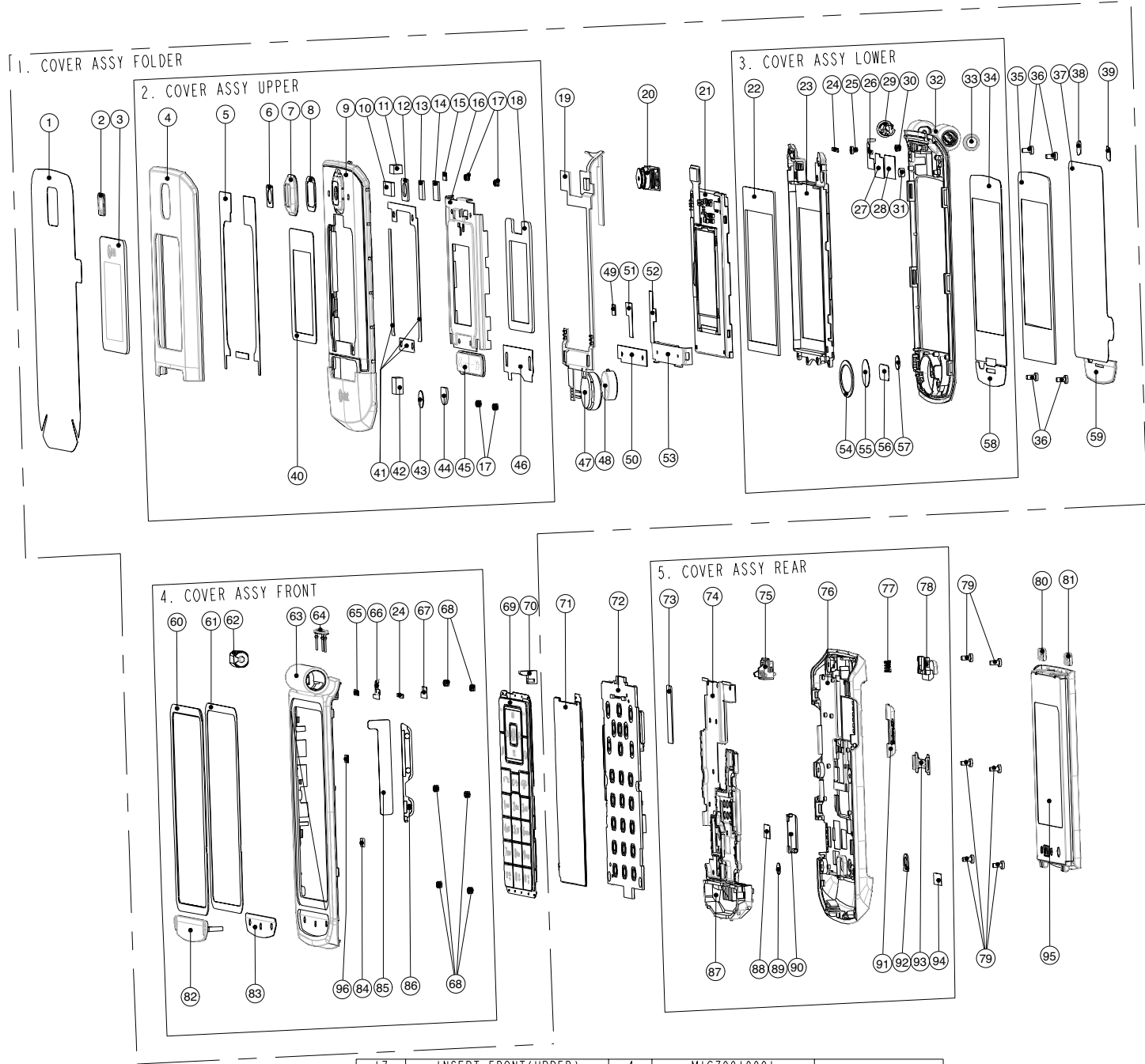
10. Calibration & RF Auto Test Program

10.3.2 Example for RF Auto Test



11. EXPLODED VIEW & REPLACEMENT PART LIST

11.1 EXPLODED VIEW



| | | | | |
|----|--------------------------|---|-------------|--|
| 17 | INSERT, FRONT(UPPER) | 4 | MICZ0019901 | |
| 16 | FRAME, UPPER | 1 | MFEZ0012401 | |
| 15 | PAD, FPCB (UPPER) | 1 | MPBF0021101 | |
| 14 | PAD, TOUCH IC | 1 | MPBZ0173801 | |
| 13 | PAD, CAMERA CONN | 1 | MPBZ0183001 | |
| 12 | PAD, CAMERA | 1 | MPBT0038101 | |
| 11 | PAD, CONNECTOR(UPPER) | 1 | MICZ0019901 | |
| 10 | PAD, LCD, CONN UPPER | 1 | MPBZ0173601 | |
| 9 | COVER, UPPER | 1 | MCJ0047001 | |
| 8 | TAPE, DECO CAMERA | 1 | MTAZ0182901 | |
| 7 | DECO, CAMERA | 1 | MDAD0028601 | |
| 6 | TAPE, WINDOW CAMERA | 1 | MTAD0067901 | |
| 5 | TAPE, DECO UPPER | 1 | MTAA0131601 | |
| 4 | DECO, FOLDER UPPER | 1 | MDAE0038801 | |
| 3 | WINDOW, LCD(SUB) | 1 | MWAF0036101 | |
| 2 | WINDOW, CAMERA | 1 | MWAE0024001 | |
| 1 | TAPE, PROTECTION(FOLDER) | 1 | MTAB0138101 | |

| | | | | |
|-----|--------------------------|------|-------------|--------|
| 96 | GASKET, SIDE KEY | 1 | MGAD0144801 | |
| 95 | BATTERY PACK | 1 | SBPP0022901 | |
| 94 | LABEL, QUALCOMM(BLACK) | 1 | MLAN0002802 | |
| 93 | LOCKER, SIM | 1 | MLEY0000801 | |
| 92 | CAP, MOBILE SWITCH | 1 | MCCF0045201 | |
| 91 | CAP, MULTIMEDIA CARD | 1 | MCCG0007301 | |
| 90 | CAP, EARPHONE JACK | 1 | MCCC0042701 | |
| 89 | LABEL, AS | 1 | MLAB0001102 | |
| 88 | INSULATOR, REAR | 1 | MIDZ0139901 | |
| 87 | ANTENNA | 1 | SNGF0023001 | |
| 86 | BUTTON, SIDE | 1 | MBJL0038701 | |
| 85 | INSULATOR, SIDEKEY | 1 | MIDZ0127801 | |
| 84 | FILTER, MIC | 1 | MFB00022001 | |
| 83 | TAPE, STOPPER(FRONT) | 1 | MTAZ0192201 | |
| 82 | STOPPER, FRONT | 1 | MSGY0020801 | |
| 81 | CAP, SCREW MAIN(L) | 1 | MCC0101301 | |
| 80 | CAP, SCREW MAIN(R) | 1 | MCC0101401 | |
| 79 | SCREW MACHINE BIND | 6 | GMEY0011201 | |
| 78 | LOCKER, BATTERY | 1 | MLEA0037201 | |
| 77 | SPRING, LOCKER | 1 | MSDC0008301 | |
| 76 | COVER, REAR | 1 | MCJN0063901 | |
| 75 | ANT, BULETOOH | 1 | SNGF0022901 | |
| 74 | CAN SHIELD | 1 | MCBA0017301 | |
| 73 | GSKET, BT OB CONN. | 1 | MGAD0140701 | |
| 72 | PCB ASSY, MAIN | 1 | SAFY0195401 | |
| 71 | DOVE ASSY, METAL | 1 | ADCA0063201 | |
| 70 | STOPPER, HINGE | 1 | MSG00017601 | |
| 69 | BUTTON ASSY, DIAL | 1 | ABGA0007601 | |
| 68 | INSERT, FRONT(FRONT) | 6 | MICZ0019901 | |
| 67 | INSULATOR, PLATE(FRONT) | 1 | MIDZ0127701 | |
| 66 | PLATE, GROUND, FRONT | 1 | MPFD0003901 | |
| 65 | TAPE, PLATE(FRONT) | 1 | MTAZ0183001 | |
| 64 | STOPPER, FOLDER | 1 | MSGY0020901 | |
| 63 | COVER, FRONT | 1 | MCJK0068301 | |
| 62 | HINGE, FOLDER | 1 | MHF00012601 | |
| 61 | TAPE, DECO FRONT | 1 | MTAA0131701 | |
| 60 | DECO ASSY(FRONT) | 1 | ADBY0011401 | |
| 59 | DECO, RECEIVER | 1 | MDAH0021201 | |
| 58 | TAPE, DECO RECEIVER | 1 | MTAA0131501 | |
| 57 | CAP, VT CAMERA | 1 | MCCZ0025701 | |
| 56 | FILTER, SPEAKER | 1 | MFB00028801 | |
| 55 | TAPE, MOTOR | 1 | MTAF0011001 | |
| 54 | PAD, SPEAKER(LOWER) | 1 | MPBN0039201 | |
| 53 | PLATE, MODKEY | 1 | MPFZ0027901 | |
| 52 | GASKET, LCD(R) | 1 | MGAD0140601 | |
| 51 | GASKET, LCD(L) | 1 | MGAD0140301 | |
| 50 | PAD, PLATE MODKEY | 1 | MPBZ0173901 | |
| 49 | GASKET, SHIELD FORM(LCD) | 1 | MGAD0140401 | |
| 48 | VIBRATOR | 1 | SJMY0006506 | |
| 47 | SPEAKER | 1 | SUSY0026902 | |
| 46 | INSULATOR, MODKEY(IN) | 1 | MIDZ0131401 | |
| 45 | BUTTON, FUNCTION | 1 | MBJC0021401 | |
| 44 | PAD, MOTOR | 1 | MPBJ0041101 | |
| 43 | PAD, SPEAKER UPPER | 1 | MPBN0039301 | |
| 42 | PAD, VT CAMERA CONN | 1 | MPBZ0173701 | |
| 41 | TAPE, DECO UPPER | 1 | MTAA0131601 | |
| 40 | TAPE, WINDOW SUB | 1 | MTAE0030001 | |
| 39 | CAP, SCREW FOLDER(R) | 1 | MCC0101101 | |
| 38 | CAP, SCREW FOLDER(L) | 1 | MCC0101001 | |
| 37 | TAPE, PROTECTION(FOLDER) | 1 | MTAB0166001 | |
| 36 | SCREW MACHINE BIND | 4 | GMEY0011201 | |
| 35 | WINDOW, LCD(MAIN) | 1 | MWAC0075901 | |
| 34 | TAPE, WINDOW MAIN | 1 | MTAD0064601 | |
| 33 | DECO, SIDE R | 1 | MDAC0019501 | |
| 32 | COVER, FOLDER(LOWER) | 1 | MCJH0037701 | |
| 31 | MAGNET, SWITCH | 1 | MMAA0000601 | |
| 30 | INSERT, FRONT(LOWER) | 1 | MICZ0019901 | |
| 29 | DECO, SIDE L | 1 | MDAC0019301 | |
| 28 | TAPE, CAMERA(LOWER) | 1 | MTAZ0182601 | |
| 27 | INSULATOR, LCD CONN | 1 | MIDZ0127301 | |
| 26 | PLATE, GROUND(LOWER) | 1 | MPFD0003801 | |
| 25 | SCREW MACHINE BIND | 1 | GMZ70019002 | |
| 24 | GASKET, PLATE FRONT | 1 | MGAD0144701 | |
| 23 | BRACKET, LCD | 1 | MBFF0012301 | |
| 22 | PAD, LCD(MAIN) | 1 | MPBG0056601 | |
| 21 | LCD MODULE | 1 | SVLM0020502 | |
| 20 | CAMERA | 1 | SVCY0013001 | |
| 19 | PCB ASSY, FLEXIBLE | 1 | SACT0058701 | |
| 18 | PAD, LCD SUB | 1 | MPB00030801 | |
| NO. | DESCRIPTION | Q'TY | DRAWING NO. | REMARK |

11. EXPLODED VIEW & REPLACEMENT PART LIST

11.2 Replacement Parts <Mechanic component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

| Level | Location No. | Description | Part Number | Specification | Color | Remark | |
|-------|--------------|------------------------------|-------------|--|-------|----------------|-------|
| 1 | | IMT,FOLDER | TIFF0014801 | | | Black | |
| 2 | AAAY00 | ADDITION | AAAY0196301 | | | Black | |
| 2 | APEY00 | PHONE | APEY0385901 | | | Black | |
| 3 | ACGG00 | COVER ASSY,FOLDER | ACGG0080001 | | | Black | |
| 4 | ABGA00 | BUTTON ASSY,DIAL | ABGA0007601 | | | Titan Silver | 69 |
| 4 | ACGH00 | COVER ASSY, FOLDER(LOWER) | ACGH0046901 | | | Titan Silver | |
| 5 | GMZZ00 | SCREW MACHINE | GMZZ0019002 | 2.7 mm,1.5 mm,MSWR3 ,N ,+ , - ,NYLOK Coating 1 | | Silver | 25 |
| 5 | MBFF00 | BRACKET,LCD | MBFF0012301 | CASTING, Al Alloy, , , , , | | Titan Silver | 23 |
| 5 | MCCZ00 | CAP | MCCZ0025701 | COMPLEX, (empty), , , , , | | Black | 57 |
| 5 | MCJH00 | COVER,FOLDER(LOWER) | MCJH0037701 | MOLD, PC LUPOY SC-1004A, , , , , | | Titan Silver | 32 |
| 5 | MDAC00 | DECO,SIDE | MDAC0019301 | COMPLEX, (empty), , , , , | | Titanium Black | 29 |
| 5 | MDAC01 | DECO,SIDE | MDAC0019501 | COMPLEX, (empty), , , , , | | Titanium Black | 33 |
| 5 | MFBC00 | FILTER,SPEAKER | MFBC0028801 | COMPLEX, (empty), , , , , | | Black | 56 |
| 5 | MGAD00 | GASKET,SHIELD FORM | MGAD0144701 | COMPLEX, (empty), , , , , | | Gold | 24 |
| 5 | MICZ00 | INSERT | MICZ0019901 | | | Without Color | 30,68 |
| 5 | MIDZ00 | INSULATOR | MIDZ0127301 | COMPLEX, (empty), , , , , | | Without Color | 27 |
| 5 | MMAA00 | MAGNET,SWITCH | MMAA0000601 | LG-G510,511,512 common use, DIA : 3.0mm+1.5t | | Silver | 31 |
| 5 | MPBG00 | PAD,LCD | MPBG0056601 | COMPLEX, (empty), , , , , | | Black | 22 |
| 5 | MPBN00 | PAD,SPEAKER | MPBN0039201 | COMPLEX, (empty), , , , , | | Black | 54 |
| 5 | MPFD00 | PLATE,GROUND | MPFD0003801 | PRESS, STS, 0.1mm, , , , | | Without Color | 26 |
| 5 | MTAD00 | TAPE,WINDOW | MTAD0064601 | COMPLEX, (empty), , , , , | | Black | 34 |
| 5 | MTAF00 | TAPE,MOTOR | MTAF0011001 | COMPLEX, (empty), , , , , | | Black | 55 |
| 5 | MTAZ00 | TAPE | MTAZ0182601 | COMPLEX, (empty), , , , , | | Black | 28 |
| 4 | ACGJ00 | COVER ASSY, FOLDER(UPPER) | ACGJ0060901 | | | Titan Silver | |
| 5 | MBJC00 | BUTTON,FUNCTION | MBJC0021401 | MOLD, PC LUPOY SC-1004A, , , , , | | Titan Silver | 45 |
| 5 | MCJJ00 | COVER,FOLDER(UPPER) | MCJJ0047001 | MOLD, PC LUPOY SC-1004A, , , , , | | Titan Silver | 9 |
| 5 | MDAD00 | DECO,CAMERA | MDAD0028601 | PRESS, STS, 0.2, , , , | | Titan Silver | 7 |
| 5 | MDAE00 | DECO,FOLDER(UPPER) | MDAE0038801 | PRESS, Al, 0.6, , , , | | Titan Silver | 4 |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark | |
|-------|--------------|--------------------|-------------|----------------------------------|-------|----------------|------|
| 5 | MFEZ00 | FRAME | MFEZ0012401 | PRESS, STS, 0.4, , , , | | Black | 16 |
| 5 | MICZ00 | INSERT | MICZ0019901 | | | Without Color | 17 |
| 5 | MIDZ00 | INSULATOR | MIDZ0131301 | COMPLEX, (empty), , , , , | | Without Color | |
| 5 | MIDZ01 | INSULATOR | MIDZ0131401 | COMPLEX, (empty), , , , , | | Without Color | 46 |
| 5 | MPBF00 | PAD,FLEXIBLE PCB | MPBF0021101 | COMPLEX, (empty), , , , , | | Black | 15 |
| 5 | MPBJ00 | PAD,MOTOR | MPBJ0041101 | COMPLEX, (empty), , , , , | | Black | 44 |
| 5 | MPBN00 | PAD,SPEAKER | MPBN0039301 | COMPLEX, (empty), , , , , | | Black | 43 |
| 5 | MPBQ00 | PAD,LCD(SUB) | MPBQ0030801 | COMPLEX, (empty), , , , , | | Black | 18 |
| 5 | MPBT00 | PAD,CAMERA | MPBT0038101 | COMPLEX, (empty), , , , , | | Black | 12 |
| 5 | MPBU00 | PAD,CONNECTOR | MPBU0008701 | COMPLEX, (empty), , , , , | | Black | |
| 5 | MPBZ00 | PAD | MPBZ0173601 | COMPLEX, (empty), , , , , | | Black | 10 |
| 5 | MPBZ01 | PAD | MPBZ0173701 | COMPLEX, (empty), , , , , | | Black | 42 |
| 5 | MPBZ02 | PAD | MPBZ0173801 | COMPLEX, (empty), , , , , | | Black | 14 |
| 5 | MPBZ04 | PAD | MPBZ0183001 | COMPLEX, (empty), , , , , | | Black | 13 |
| 5 | MTAA00 | TAPE,DECO | MTAA0131601 | COMPLEX, (empty), , , , , | | Black | 5,41 |
| 5 | MTAD00 | TAPE,WINDOW | MTAD0067901 | COMPLEX, (empty), , , , , | | Black | 6 |
| 5 | MTAE00 | TAPE,WINDOW(SUB) | MTAE0030001 | COMPLEX, (empty), , , , , | | Black | 40 |
| 5 | MTAZ01 | TAPE | MTAZ0182801 | COMPLEX, (empty), , , , , | | Black | |
| 5 | MTAZ02 | TAPE | MTAZ0182901 | COMPLEX, (empty), , , , , | | Black | 8 |
| 4 | ACGK00 | COVER ASSY,FRONT | ACGK0084401 | | | Black | |
| 5 | ADBY00 | DECO ASSY | ADBY0011401 | | | Titan Silver | 60 |
| 6 | MDAG00 | DECO,FRONT | MDAG0025201 | COMPLEX, (empty), , , , , | | Black | |
| 6 | MTAA00 | TAPE,DECO | MTAA0131701 | COMPLEX, (empty), , , , , | | Black | 61 |
| 5 | MBJL00 | BUTTON,SIDE | MBJL0038701 | COMPLEX, (empty), , , , , | | Titanium Black | 86 |
| 5 | MCJK00 | COVER,FRONT | MCJK0068301 | MOLD, PC LUPOY SC-1004A, , , , , | | Titan Silver | 63 |
| 5 | MFBD00 | FILTER,MIKE | MFBD0022001 | COMPLEX, (empty), , , , , | | Without Color | 84 |
| 5 | MGAD00 | GASKET,SHIELD FORM | MGAD0144701 | COMPLEX, (empty), , , , , | | Gold | |
| 5 | MGAD01 | GASKET,SHIELD FORM | MGAD0144801 | COMPLEX, (empty), , , , , | | Gold | 96 |
| 5 | MICZ00 | INSERT | MICZ0019901 | | | Without Color | 11 |
| 5 | MIDZ01 | INSULATOR | MIDZ0127801 | COMPLEX, (empty), , , , , | | Without Color | 85 |
| 5 | MIDZ02 | INSULATOR | MIDZ0127701 | COMPLEX, (empty), , , , , | | Without Color | 67 |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark | |
|-------|--------------|--------------------|-------------|------------------------------------|---------------|--------|----|
| 5 | MPFD00 | PLATE,GROUND | MPFD0003901 | PRESS, STS, 0.1mm, , , , | Gold | | 66 |
| 5 | MSGY00 | STOPPER | MSGY0020801 | COMPLEX, (empty), , , , | Gray | | 82 |
| 5 | MSGY01 | STOPPER | MSGY0020901 | COMPLEX, (empty), , , , | Gray | | 64 |
| 5 | MTAZ00 | TAPE | MTAZ0183001 | COMPLEX, (empty), , , , | Black | | 65 |
| 5 | MTAZ01 | TAPE | MTAZ0192201 | COMPLEX, (empty), , , , | Black | | 83 |
| 4 | ADBY00 | DECO ASSY | ADBY0011501 | | Black | | |
| 5 | MDAH00 | DECO,RECEIVER | MDAH0021201 | MOLD, PC LUPOY SC-1004A, , , , , | Black | | 59 |
| 5 | MTAA00 | TAPE,DECO | MTAA0131501 | COMPLEX, (empty), , , , | Black | | 58 |
| 4 | APGZ00 | PLATE ASSY | APGZ0002501 | | Without Color | | |
| 5 | MPBZ00 | PAD | MPBZ0173901 | COMPLEX, (empty), , , , | Black | | 50 |
| 5 | MPFZ00 | PLATE | MPFZ0027901 | PRESS, STS, 0.4, , , , | Black | | 53 |
| 4 | GMEY00 | SCREW MACHINE,BIND | GMEY0011201 | 1.4 mm,3 mm,MSWR3(BK) ,N ,+ ,NYLOK | Without Color | | |
| 4 | MCCH00 | CAP,SCREW | MCCH0101001 | COMPLEX, (empty), , , , | Titan Silver | | 38 |
| 4 | MCCH01 | CAP,SCREW | MCCH0101101 | COMPLEX, (empty), , , , | Titan Silver | | 39 |
| 4 | MGAD00 | GASKET,SHIELD FORM | MGAD0140301 | COMPLEX, (empty), , , , | Without Color | | 51 |
| 4 | MGAD01 | GASKET,SHIELD FORM | MGAD0140401 | COMPLEX, (empty), , , , | Without Color | | 49 |
| 4 | MGAD02 | GASKET,SHIELD FORM | MGAD0140601 | COMPLEX, (empty), , , , | Without Color | | 52 |
| 4 | MHFD00 | HINGE,FOLDER | MHFD0012601 | MG810c_HINGE | Without Color | | 62 |
| 4 | MIDZ00 | INSULATOR | MIDZ0144601 | COMPLEX, (empty), , , , | Green | | |
| 4 | MLAZ00 | LABEL | MLAZ0038303 | PRINTING, (empty), , , , | White | | |
| 4 | MSGB00 | STOPPER,HINGE | MSGB0017601 | MOLD, PC LUPOY SC-1004A, , , , , | Without Color | | 70 |
| 4 | MTAB00 | TAPE,PROTECTION | MTAB0138101 | COMPLEX, (empty), , , , | Without Color | | 1 |
| 4 | MTAB01 | TAPE,PROTECTION | MTAB0166001 | COMPLEX, (empty), , , , | Without Color | | 37 |
| 4 | MWAC00 | WINDOW,LCD | MWAC0075901 | COMPLEX, (empty), , , , | Black | | 35 |
| 4 | MWAE00 | WINDOW,CAMERA | MWAE0024001 | CUTTING, PMMA MR 200, , , , , | Black | | 2 |
| 4 | MWAF00 | WINDOW,LCD(SUB) | MWAF0036101 | COMPLEX, (empty), , , , | Titan Silver | | 3 |
| 6 | MGAD00 | GASKET,SHIELD FORM | MGAD0146501 | COMPLEX, (empty), , , , | Gold | | |
| 6 | MIDZ00 | INSULATOR | MIDZ0139701 | COMPLEX, (empty), , , , | Sky Blue | | |
| 6 | MIDZ01 | INSULATOR | MIDZ0139801 | COMPLEX, (empty), , , , | Sky Blue | | |
| 6 | MPBF00 | PAD,FLEXIBLE PCB | MPBF0022701 | COMPLEX, (empty), , , , | Without Color | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

11.2 Replacement Parts <Main component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

| Level | Location No. | Description | Part Number | Specification | Color Remark | |
|-------|--------------|---------------------|-------------|------------------------------------|---------------|-------|
| 3 | ACGM00 | COVER ASSY,REAR | ACGM0086101 | | Titan Silver | |
| 4 | MCBA00 | CAN,SHIELD | MCBA0017301 | PRESS, STS, 0.2mm, , , , | Without Color | 74 |
| 4 | MCCC00 | CAP,EARPHONE JACK | MCCC0042701 | COMPLEX, (empty), , , , | Titan Silver | 90 |
| 4 | MCCF00 | CAP,MOBILE SWITCH | MCCF0045201 | COMPLEX, (empty), , , , | Titan Silver | 92 |
| 4 | MCCG00 | CAP,MULTIMEDIA CARD | MCCG0007301 | COMPLEX, (empty), , , , | Titan Silver | 91 |
| 4 | MCJN00 | COVER,REAR | MCJN0063901 | MOLD, PC LUPOY SC-1004A, , , , | Titan Silver | 76 |
| 4 | MGAD00 | GASKET,SHIELD FORM | MGAD0140701 | COMPLEX, (empty), , , , | Without Color | 73 |
| 4 | MIDZ00 | INSULATOR | MIDZ0139901 | COMPLEX, (empty), , , , | Without Color | 88 |
| 4 | MLAB00 | LABEL,A/S | MLAB0001102 | C2000 USASV DIA 4.0 | White | 89 |
| 4 | MLEA00 | LOCKER,BATTERY | MLEA0037201 | MOLD, PC LUPOY SC-1004A, , , , | Titan Silver | 78 |
| 4 | MLEY00 | LOCKER | MLEY0000801 | SIM LOCKER | Silver | 93 |
| 4 | MSDC00 | SPRING,LOCKER | MSDC0008301 | | Without Color | 76 |
| 3 | GMEY00 | SCREW MACHINE,BIND | GMEY0011201 | 1.4 mm,3 mm,MSWR3(BK) ,N ,+ ,NYLOK | Without Color | 36,79 |
| 3 | MCCH00 | CAP,SCREW | MCCH0101301 | COMPLEX, (empty), , , , | Titan Silver | 81 |
| 3 | MCCH01 | CAP,SCREW | MCCH0101401 | COMPLEX, (empty), , , , | Titan Silver | 80 |
| 3 | MLAK00 | LABEL,MODEL | MLAK0006901 | | | |
| 5 | ADCA00 | DOVE ASSY,METAL | ADCA0063201 | | Without Color | 71 |
| 5 | MPBU00 | PAD,CONNECTOR | MPBU0010101 | COMPLEX, (empty), , , , | Black | |
| 5 | MLAZ00 | LABEL | MLAZ0038301 | PID Label 4 Array | Without Color | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|---------------------------------|-------------|--|-------|--------|
| 4 | SACY00 | PCB ASSY,FLEXIBLE | SACY0058701 | | | 19 |
| 5 | SACB00 | PCB ASSY, FLEXIBLE,INSERT | SACB0039601 | | | |
| 5 | SACE00 | PCB ASSY,FLEXIBLE,SMT | SACE0053301 | | | |
| 6 | SACC00 | PCB ASSY,FLEXIBLE,SMT BOTTOM | SACC0032601 | | | |
| 7 | CN101 | CONNECTOR,BOARD TO BOARD | ENBY0019101 | 24 PIN,0.4 mm,STRAIGHT , ,H1.5, MALE | | |
| 7 | CN102 | CONNECTOR,BOARD TO BOARD | ENBY0020301 | 40 PIN,0.4 mm,ETC , ,H=0.9, Socket | | |
| 7 | CON101 | CONNECTOR,BOARD TO BOARD | ENBY0033801 | 80 PIN,0.4 mm,ETC , ,H=1.5, P4S Socket | | |
| 7 | L3 | INDUCTOR,CHIP | ELCH0005825 | 100 nH,J ,1005 ,R/TP , | | |
| 7 | L4 | INDUCTOR,CHIP | ELCH0005825 | 100 nH,J ,1005 ,R/TP , | | |
| 6 | SACD00 | PCB ASSY,FLEXIBLE,SMT TOP | SACD0043501 | | | |
| 7 | C101 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 7 | C102 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 7 | L1 | INDUCTOR,CHIP | ELCH0005825 | 100 nH,J ,1005 ,R/TP , | | |
| 7 | L2 | INDUCTOR,CHIP | ELCH0005825 | 100 nH,J ,1005 ,R/TP , | | |
| 7 | LD101 | DIODE,LED,CHIP | EDLH0012301 | BLUE ,ETC ,R/TP ,Pb_free | | |
| 7 | LD102 | DIODE,LED,CHIP | EDLH0012301 | BLUE ,ETC ,R/TP ,Pb_free | | |
| 7 | R101 | RES,CHIP | ERHY0000220 | 100 ohm,1/16W,J ,1005,R/TP | | |
| 7 | R102 | RES,CHIP | ERHY0000220 | 100 ohm,1/16W,J ,1005,R/TP | | |
| 7 | R103 | RES,CHIP,MAKER | ERHZ0000441 | 22 ohm,1/16W ,J ,1005 ,R/TP | | |
| 7 | R104 | RES,CHIP | ERHY0003601 | 2700 ohm,1/16W ,J ,1005 ,R/TP | | |
| 7 | R105 | RES,CHIP | ERHY0003601 | 2700 ohm,1/16W ,J ,1005 ,R/TP | | |
| 7 | R106 | RES,CHIP | ERHY0003601 | 2700 ohm,1/16W ,J ,1005 ,R/TP | | |
| 7 | U1 | IC | EUSY0328401 | touch controller IC 8 Channel 4mm x 4mm ,24 PIN,R/TP ,touch controller IC | | |
| 7 | VA101 | VARISTOR | SEVY0001001 | 14 V ,SMD ,50pF, 1005 | | |
| 7 | VA102 | VARISTOR | SEVY0001001 | 14 V ,SMD ,50pF, 1005 | | |
| 7 | VA103 | VARISTOR | SEVY0001001 | 14 V ,SMD ,50pF, 1005 | | |
| 7 | VA104 | VARISTOR | SEVY0001001 | 14 V ,SMD ,50pF, 1005 | | |
| 6 | SPCY00 | PCB,FLEXIBLE | SPCY0096401 | POLYI ,0.5 mm,MULTI-5 ,CU570 F-LCD ,,,,,,,,,, | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|--------------------------|--------------|--|-------|--------|
| 4 | SJMY00 | VIBRATOR,MOTOR | SJMY0006506 | 3 V,0.08 A,10*3.45 ,17mm | | 48 |
| 4 | SUSY00 | SPEAKER | SUSY0026902 | ASSY ,8 ohm,90 dB,1813 mm,15mm ,Double diaphragm , , , , , WIRE | | 47 |
| 4 | SVCY00 | CAMERA | SVCY0013001 | CMOS ,MEGA ,1.3M, S/File 1/3.8", 8*14*5t, BtB | | 20 |
| 4 | SVLM00 | LCD MODULE | SVLM0020502 | MAIN ,M_176*220 S_128*160 ,41*57.7*3.3t ,262k ,TFT ,TM ,M_S1D503B S_LGDP4512 ,Main : 2.2" S_1.3" | | 21 |
| 4 | SNGF00 | ANTENNA,GSM,FIXED | SNGF0022901 | 3.0 ,-2 dBd ,BLUETOOTH, INTERNAL ; ,SINGLE ,-2.0 ,50 ,3.0 | | 75 |
| 4 | SNGF01 | ANTENNA,GSM,FIXED | SNGF0023001 | 3.0 ,-2 dBd , GSM850+EGSM+DCS+PCS+W-BAND II+W-BAND V, INTERNAL ; ,MULTI ,-2.0 ,50 ,3.0 | | 87 |
| 3 | SAFY00 | PCB ASSY,MAIN | SAFY0195401 | | | 72 |
| 4 | SAFB00 | PCB ASSY,MAIN,INSERT | SAFB0069601 | | | |
| 5 | SPKY | PCB,SIDEKEY | SPKY0044801 | POLYI ,0.2 mm,DOUBLE ,CU570 SIDEKEY ; , , , , , , , , , | | |
| 4 | SAFF00 | PCB ASSY,MAIN,SMT | SAFF0116501 | | | |
| 5 | SAFC00 | PCB ASSY,MAIN,SMT BOTTOM | SAFC0087901 | | | |
| 6 | BAT401 | BATTERY,CELL,LITHIUM | SBCL0001701 | 2 V,0.5 mAh,CYLINDER ,Reflow type BB, Max T 1.67, phi 4.8, Pb-Free | | |
| 6 | C1 | CAP,CHIP,MAKER | ECZH0000841 | 56 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C10 | CAP,CERAMIC,CHIP | ECCH0001002 | 180 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C100 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C101 | CAP,CERAMIC,CHIP | ECCH0000118 | 30 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C102 | CAP,CERAMIC,CHIP | ECCH0000118 | 30 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C103 | CAP,CERAMIC,CHIP | ECCH0000118 | 30 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C104 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C105 | CAP,CERAMIC,CHIP | ECCH0000118 | 30 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C107 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C108 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C11 | CAP,CHIP,MAKER | ECZH00004402 | 0.1 uF,16V ,Z ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C110 | CAP,CERAMIC,CHIP | ECCH0000101 | .5 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C112 | CAP,CERAMIC,CHIP | ECCH0000129 | 120 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C113 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C114 | CAP,CERAMIC,CHIP | ECCH0000129 | 120 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C115 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C116 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C117 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C12 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C13 | CAP,CERAMIC,CHIP | ECCH0000148 | 2.7 nF,50V,K,X7R,HD,1005,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-----------------------|-------------|-------------------------------------|-------|--------|
| 6 | C14 | CAP,CERAMIC,CHIP | ECCH0000144 | 1.2 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C15 | CAP,CHIP,MAKER | ECZH0000841 | 56 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C17 | CAP,CHIP,MAKER | ECZH0000816 | 12 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C176 | INDUCTOR,CHIP | ELCH0005015 | 6.8 nH,S ,1005 ,R/TP , | | |
| 6 | C18 | CAP,CHIP,MAKER | ECZH0000841 | 56 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C2 | CAP,CERAMIC,CHIP | ECCH0001002 | 180 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C20 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C201 | CAP,TANTAL,CHIP,MAKER | ECTZ0004701 | 4.7 uF,6.3V ,M ,STD ,1608 ,R/TP | | |
| 6 | C202 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C203 | CAP,TANTAL,CHIP,MAKER | ECTZ0005201 | 10 uF,6.3V ,M ,L ,ESR ,1608 ,R/TP | | |
| 6 | C204 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C205 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C206 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C207 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C208 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C209 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C21 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C210 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C211 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C212 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C213 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C214 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C215 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C216 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C217 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C218 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C219 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C22 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C220 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C221 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C222 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C223 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C224 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C225 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|------------------|-------------|-------------------------------------|-------|--------|
| 6 | C226 | CAP,CERAMIC,CHIP | ECCH0009107 | 2.2 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C227 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C228 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C229 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C23 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C230 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C231 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C232 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C233 | CAP,CERAMIC,CHIP | ECCH0009512 | 1000 pF,25V ,K ,X7R ,HD ,0603 ,R/TP | | |
| 6 | C234 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C235 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C236 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C237 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C238 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C239 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C24 | CAP,CERAMIC,CHIP | ECCH0000138 | 390 pF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C240 | CAP,CERAMIC,CHIP | ECCH0000161 | 33 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C241 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C25 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C26 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C27 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C28 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C29 | CAP,CHIP,MAKER | ECZH0000844 | 68 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C3 | CAP,CHIP,MAKER | ECZH0000822 | 1.5 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C30 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C304 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C305 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C306 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C307 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C308 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C309 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C31 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C310 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C311 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-----------------------|-------------|--|-------|--------|
| 6 | C314 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C315 | CAP,CERAMIC,CHIP | ECCH0009106 | 10 nF,16V ,K ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C317 | CAP,TANTAL,CHIP | ECTH0004807 | 10 uF,10V ,M ,STD ,1608 ,R/TP , , , [empty] , [empty] , , -55TO+125C , , [empty] , [empty] , [empty] , [empty] | | |
| 6 | C318 | CAP,CERAMIC,CHIP | ECCH0000179 | 22 nF,16V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C319 | CAP,CERAMIC,CHIP | ECCH0000179 | 22 nF,16V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C32 | CAP,CERAMIC,CHIP | ECCH0000101 | .5 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C321 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C34 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C35 | CAP,TANTAL,CHIP,MAKER | ECTZ0004204 | 100 uF,6.3V ,M ,STD ,3216 ,R/TP | | |
| 6 | C36 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C37 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C38 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C39 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C4 | CAP,CERAMIC,CHIP | ECCH0001002 | 180 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C401 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C402 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C403 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C404 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C406 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C407 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C408 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C409 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C41 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C410 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C411 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C412 | CAP,CERAMIC,CHIP | ECCH0000155 | 10 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C413 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C414 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C415 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C416 | CAP,CERAMIC,CHIP | ECCH0000129 | 120 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C42 | CAP,TANTAL,CHIP | ECTH0003704 | 4.7 uF,10V ,M ,STD ,1608 ,R/TP | | |
| 6 | C43 | CAP,CERAMIC,CHIP | ECCH0000115 | 22 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C46 | CAP,CERAMIC,CHIP | ECCH0000155 | 10 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C48 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|------------------|-------------|---|-------|--------|
| 6 | C49 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C5 | CAP,CERAMIC,CHIP | ECCH0000107 | 6 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C50 | CAP,CERAMIC,CHIP | ECCH0000147 | 2.2 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C51 | CAP,CERAMIC,CHIP | ECCH0000155 | 10 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C52 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C53 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C54 | CAP,CHIP,MAKER | ECZH0004402 | 0.1 uF,16V ,Z ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C56 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C57 | CAP,CERAMIC,CHIP | ECCH0000147 | 2.2 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C58 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C59 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C6 | CAP,CERAMIC,CHIP | ECCH0000107 | 6 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C601 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C602 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C603 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C604 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C605 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C61 | CAP,CERAMIC,CHIP | ECCH0000195 | 3.9 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C62 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C64 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C66 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C67 | CAP,CHIP,MAKER | ECZH0000844 | 68 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C68 | CAP,CHIP,MAKER | ECZH0000841 | 56 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C69 | CAP,CHIP,MAKER | ECZH0000822 | 1.5 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C7 | CAP,CERAMIC,CHIP | ECCH0001002 | 180 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C70 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C701 | CAP,TANTAL,CHIP | ECTH0005201 | 33 uF,6.3V ,M ,L ,ESR ,2012 ,R/TP , , ,[empty] ,[empty] , ,[empty] , ,2.2X1.1X1.1MM ,[empty] ,[empty] ,[empty] | | |
| 6 | C703 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C704 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C705 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C706 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C707 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C708 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C709 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-----------------------|-------------|-------------------------------------|-------|--------|
| 6 | C71 | CAP,CERAMIC,CHIP | ECCH0000120 | 39 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C710 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C711 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C712 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C713 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C714 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C715 | CAP,CERAMIC,CHIP | ECCH0005602 | 2.2 uF,16V ,K ,X5R ,HD ,1608 ,R/TP | | |
| 6 | C716 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C718 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C719 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C72 | CAP,CERAMIC,CHIP | ECCH0000147 | 2.2 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C720 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C721 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C722 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C725 | CAP,TANTAL,CHIP,MAKER | ECTZ0005201 | 10 uF,6.3V ,M ,L ,ESR ,1608 ,R/TP | | |
| 6 | C726 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C727 | CAP,CERAMIC,CHIP | ECCH0000198 | 2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C728 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C729 | CAP,CERAMIC,CHIP | ECCH0000393 | 22 uF,6.3V ,M ,X5R ,HD ,2012 ,R/TP | | |
| 6 | C73 | CAP,TANTAL,CHIP | ECTH0003703 | 4.7 uF,6.3V ,M ,STD ,1608 ,R/TP | | |
| 6 | C730 | CAP,CERAMIC,CHIP | ECCH0005604 | 10 uF,6.3V ,M ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C731 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C732 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C733 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C734 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C735 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C736 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C738 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C739 | CAP,CERAMIC,CHIP | ECCH0006201 | 4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C74 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C77 | CAP,CERAMIC,CHIP | ECCH0000147 | 2.2 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C8 | CAP,CERAMIC,CHIP | ECCH0000105 | 4 pF,50V,C,NP0,TC,1005,R/TP | | |
| 6 | C801 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C802 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-----------------------|-------------|--|-------|--------|
| 6 | C803 | CAP,TANTAL,CHIP | ECTH0002002 | 33 uF,10V ,M ,L_ESR ,2012 ,R/TP , , , [empty] , [empty] , , -55TO+125C , , 2.2X1.1X1.1MM , [empty] , [empty] , [empty] | | |
| 6 | C804 | CAP,TANTAL,CHIP | ECTH0002002 | 33 uF,10V ,M ,L_ESR ,2012 ,R/TP , , , [empty] , [empty] , , -55TO+125C , , 2.2X1.1X1.1MM , [empty] , [empty] , [empty] | | |
| 6 | C805 | CAP,CERAMIC,CHIP | ECCH0002002 | 47000 pF,10V ,K ,B ,HD ,1005 ,R/TP | | |
| 6 | C806 | CAP,CERAMIC,CHIP | ECCH0009103 | 100 pF,50V ,J ,X7R ,TC ,0603 ,R/TP | | |
| 6 | C807 | CAP,TANTAL,CHIP | ECTH0004402 | 33 uF,6.3V ,M ,L_ESR ,2012 ,R/TP | | |
| 6 | C808 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C81 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C811 | CAP,CERAMIC,CHIP | ECCH0000155 | 10 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C813 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C814 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C815 | CAP,TANTAL,CHIP,MAKER | ECTZ0005201 | 10 uF,6.3V ,M ,L_ESR ,1608 ,R/TP | | |
| 6 | C816 | CAP,CHIP,MAKER | ECZH0000830 | 33 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C819 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C82 | CAP,CERAMIC,CHIP | ECCH0000105 | 4 pF,50V,C,NP0,TC,1005,R/TP | | |
| 6 | C820 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C821 | CAP,CHIP,MAKER | ECZH0000802 | 1 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C822 | CAP,CHIP,MAKER | ECZH0000802 | 1 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C823 | CAP,CHIP,MAKER | ECZH0000802 | 1 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C824 | CAP,CERAMIC,CHIP | ECCH0009501 | 33 pF,25V ,J ,NP0 ,TC ,0603 ,R/TP | | |
| 6 | C825 | CAP,CERAMIC,CHIP | ECCH0000118 | 30 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C826 | CAP,CERAMIC,CHIP | ECCH0009501 | 33 pF,25V ,J ,NP0 ,TC ,0603 ,R/TP | | |
| 6 | C83 | CAP,CERAMIC,CHIP | ECCH0000143 | 1 nF,50V,K,X7R,HD,1005,R/TP | | |
| 6 | C830 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C831 | CAP,CERAMIC,CHIP | ECCH0000110 | 10 pF,50V,D,NP0,TC,1005,R/TP | | |
| 6 | C832 | CAP,CERAMIC,CHIP | ECCH0000112 | 15 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C833 | CAP,CERAMIC,CHIP | ECCH0000112 | 15 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C834 | CAP,CHIP,MAKER | ECZH0004402 | 0.1 uF,16V ,Z ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C835 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C836 | CAP,CERAMIC,CHIP | ECCH0005604 | 10 uF,6.3V ,M ,X5R ,TC ,1608 ,R/TP | | |
| 6 | C837 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C838 | CAP,CERAMIC,CHIP | ECCH0009101 | 0.1 uF,6.3V ,K ,X5R ,TC ,0603 ,R/TP | | |
| 6 | C839 | CAP,CERAMIC,CHIP | ECCH0002001 | 100000 pF,6.3V ,K ,B ,HD ,1005 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|--------------------------|-------------|---|-------|--------|
| 6 | C84 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C85 | CAP,CERAMIC,CHIP | ECCH0000105 | 4 pF,50V,C,NP0,TC,1005,R/TP | | |
| 6 | C86 | CAP,CERAMIC,CHIP | ECCH0004904 | 1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP | | |
| 6 | C87 | CAP,FILM,MPP | ECFD0000105 | 2.2 nF,16V ,J ,STD ,SMD ,1608 mm,R/TP ,; , ,5% ,[empty] ,[empty] ,-55TO+125C ,[empty] ,1.6X0.8X0.7MM ,R/TP | | |
| 6 | C88 | CAP,CERAMIC,CHIP | ECCH0000187 | 150 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C9 | CAP,CHIP,MAKER | ECZH0000816 | 12 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C90 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C91 | CAP,CERAMIC,CHIP | ECCH0005602 | 2.2 uF,16V ,K ,X5R ,HD ,1608 ,R/TP | | |
| 6 | C92 | CAP,CERAMIC,CHIP | ECCH0000127 | 82 pF,50V,J,NP0,TC,1005,R/TP | | |
| 6 | C93 | CAP,CERAMIC,CHIP | ECCH0000182 | 0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP | | |
| 6 | C94 | CAP,CERAMIC,CHIP | ECCH0000155 | 10 nF,16V,K,X7R,HD,1005,R/TP | | |
| 6 | C95 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C96 | CAP,CHIP,MAKER | ECZH0000813 | 100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | C97 | CAP,CHIP,MAKER | ECZH0004402 | 0.1 uF,16V ,Z ,NP0 ,TC ,1005 ,R/TP | | |
| 6 | CN603 | CONNECTOR,BOARD TO BOARD | ENBY0018501 | 10 PIN,.4 mm,STRAIGHT , ,H=0.9,HEADER | | |
| 6 | CN801 | CONNECTOR,ETC | ENZY0020101 | 3 PIN,2.5 mm,ETC , , | | |
| 6 | CON401 | CONN,SOCKET | ENSY0001602 | 6 PIN,ETC ,5 IRECTIONAL ,2.54 mm,K(GC200) | | |
| 6 | CON601 | CONNECTOR,BOARD TO BOARD | ENBY0033701 | 80 PIN,0.4 mm,ETC , ,H=1.5, P4S Header | | |
| 6 | CON801 | CONNECTOR,I/O | ENRY0006801 | 18 PIN,0.4 mm,ETC , , , ,18 ,0.40MM ,ANGLE ,RECEPTACLE ,SMD ,R/TP , | | |
| 6 | D601 | DIODE,SWITCHING | EDSY0011901 | EMD2 ,30 V,1 A,R/TP ,VF=1.5V(IF=200mA) , IR=30uA(VR=10V) | | |
| 6 | D602 | DIODE,SWITCHING | EDSY0011901 | EMD2 ,30 V,1 A,R/TP ,VF=1.5V(IF=200mA) , IR=30uA(VR=10V) | | |
| 6 | D603 | DIODE,SWITCHING | EDSY0011901 | EMD2 ,30 V,1 A,R/TP ,VF=1.5V(IF=200mA) , IR=30uA(VR=10V) | | |
| 6 | D701 | DIODE,SWITCHING | EDSY0011901 | EMD2 ,30 V,1 A,R/TP ,VF=1.5V(IF=200mA) , IR=30uA(VR=10V) | | |
| 6 | D803 | DIODE,TVS | EDTY0007501 | SOD-523 ,5 V,240 W,R/TP ,Vc 12.5V , 160pF , 1.6*0.8*.06 | | |
| 6 | D804 | DIODE,TVS | EDTY0007801 | SC-70 ,5 V,150 W,R/TP ,LOW CAPACITANCE TVS ARRAY | | |
| 6 | D805 | DIODE,TVS | EDTY0007401 | SMD ,12 V,350 W,R/TP , | | |
| 6 | FB1 | FILTER,BEAD,CHIP | SFBH0009801 | 600 ohm,1005 ,DC Res.0.6ohm, R.C.500mA | | |
| 6 | FL101 | FILTER,SAW,DUAL | SFSB0000601 | 836.5 MHz,25 MHz,4.4 dB,17 dB,897.5 MHz,35 MHz,4.4 dB,10 dB,3.2*2.5*1.5 ,SMD ,Pb-free_Tx Dual SAW & Switch Module | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|------------------|-------------|--|-------|--------|
| 6 | FL102 | DUPLEXER,PCS | SDPY0002902 | 1880 MHz,1960 MHz,3.8 dB,3.5 dB,43 dB,52 dB,3.8*3.8*1.4 ,SMD ,FBAR | | |
| 6 | FL103 | FILTER,SAW | SFSY0018101 | 836.5 MHz,2.0*1.6*0.68 ,SMD , | | |
| 6 | FL104 | DUPLEXER,DCN | SDDY0004101 | 836.5 MHz,881.5 MHz,2.0 dB,2.7 dB,49 dB,61 dB,3.0*2.5*1.25 ,SMD , | | |
| 6 | FL105 | FILTER,SAW | SFSY0018201 | 881.5 MHz,2.0*1.4*0.78 ,SMD , | | |
| 6 | FL106 | FILTER,SAW | SFSY0024901 | 1960 MHz,2.0*1.4*0.68 ,SMD ,5pin, Unbal-Bal, 50/100, B7834 Low Loss ver. | | |
| 6 | FL110 | FILTER,SAW | SFSY0020101 | 1880 MHz,2.0*1.6*0.8 ,SMD , | | |
| 6 | FL601 | FILTER,EMI/POWER | SFEY0010501 | SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free | | |
| 6 | FL602 | FILTER,EMI/POWER | SFEY0010501 | SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free | | |
| 6 | FL603 | FILTER,EMI/POWER | SFEY0010501 | SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free | | |
| 6 | FL604 | FILTER,EMI/POWER | SFEY0010501 | SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free | | |
| 6 | FL605 | FILTER,EMI/POWER | SFEY0010501 | SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free | | |
| 6 | FL606 | FILTER,EMI/POWER | SFEY0013501 | SMD ,18V,4ch. EMI_ESD Filter (10 Ohm,7.5pF) | | |
| 6 | FL607 | FILTER,EMI/POWER | SFEY0013501 | SMD ,18V,4ch. EMI_ESD Filter (10 Ohm,7.5pF) | | |
| 6 | FL608 | FILTER,EMI/POWER | SFEY0013501 | SMD ,18V,4ch. EMI_ESD Filter (10 Ohm,7.5pF) | | |
| 6 | FL609 | FILTER,EMI/POWER | SFEY0013501 | SMD ,18V,4ch. EMI_ESD Filter (10 Ohm,7.5pF) | | |
| 6 | L101 | INDUCTOR,CHIP | ELCH0001408 | 6.8 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L102 | INDUCTOR,CHIP | ELCH0001401 | 15 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L103 | INDUCTOR,CHIP | ELCH0005806 | 4.7 nH,S ,1005 ,R/TP , | | |
| 6 | L105 | INDUCTOR,CHIP | ELCH0001408 | 6.8 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L106 | INDUCTOR,CHIP | ELCH0001408 | 6.8 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L107 | INDUCTOR,CHIP | ELCH0005003 | 12 nH,J ,1005 ,R/TP , | | |
| 6 | L108 | INDUCTOR,CHIP | ELCH0001401 | 15 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L110 | INDUCTOR,CHIP | ELCH0001408 | 6.8 nH,J ,1005 ,R/TP ,Pb Free | | |
| 6 | L111 | INDUCTOR,CHIP | ELCH0004715 | 27 nH,J ,1005 ,R/TP , | | |
| 6 | L112 | INDUCTOR,CHIP | ELCH0005019 | 68 nH,J ,1005 ,R/TP , | | |
| 6 | L113 | INDUCTOR,CHIP | ELCH0003825 | 56 nH,J ,1005 ,R/TP ,chip inductor,PBFREE | | |
| 6 | L114 | INDUCTOR,CHIP | ELCH0004715 | 27 nH,J ,1005 ,R/TP , | | |
| 6 | L115 | INDUCTOR,CHIP | ELCH0001421 | 47 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L116 | INDUCTOR,CHIP | ELCH0005813 | 27 nH,J ,1005 ,R/TP , | | |
| 6 | L117 | INDUCTOR,CHIP | ELCH0003827 | 47 nH,J ,1005 ,R/TP ,chip coil | | |
| 6 | L118 | INDUCTOR,CHIP | ELCH0003827 | 47 nH,J ,1005 ,R/TP ,chip coil | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|--------------------|-------------|--|-------|--------|
| 6 | L119 | INDUCTOR,CHIP | ELCH0005813 | 27 nH,J ,1005 ,R/TP , | | |
| 6 | L120 | INDUCTOR,CHIP | ELCH0001421 | 47 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L122 | INDUCTOR,CHIP | ELCH0005013 | 4.7 nH,S ,1005 ,R/TP , | | |
| 6 | L124 | INDUCTOR,CHIP | ELCH0005020 | 1 nH,S ,1005 ,R/TP , | | |
| 6 | L125 | INDUCTOR,CHIP | ELCH0001040 | 3.9 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | L127 | INDUCTOR,CHIP | ELCH0001034 | 3.3 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | L129 | INDUCTOR,CHIP | ELCH0003826 | 3.3 nH,S ,1005 ,R/TP ,chip | | |
| 6 | L130 | INDUCTOR,CHIP | ELCH0001031 | 15 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L134 | INDUCTOR,CHIP | ELCH0001033 | 1.5 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | L135 | INDUCTOR,CHIP | ELCH0001035 | 4.7 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | L137 | INDUCTOR,CHIP | ELCH0001009 | 1.2 nH,S ,1005 ,R/TP , | | |
| 6 | L139 | INDUCTOR,CHIP | ELCH0001031 | 15 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L140 | INDUCTOR,CHIP | ELCH0001031 | 15 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L141 | INDUCTOR,CHIP | ELCH0005006 | 33 nH,J ,1005 ,R/TP , | | |
| 6 | L142 | INDUCTOR,CHIP | ELCH0001031 | 15 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L143 | INDUCTOR,CHIP | ELCH0001009 | 1.2 nH,S ,1005 ,R/TP , | | |
| 6 | L144 | INDUCTOR,CHIP | ELCH0001421 | 47 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L145 | INDUCTOR,CHIP | ELCH0001421 | 47 nH,J ,1005 ,R/TP ,PBFREE | | |
| 6 | L146 | INDUCTOR,CHIP | ELCH0005019 | 68 nH,J ,1005 ,R/TP , | | |
| 6 | L147 | INDUCTOR,CHIP | ELCH0001035 | 4.7 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | L148 | INDUCTOR,CHIP | ELCH0005020 | 1 nH,S ,1005 ,R/TP , | | |
| 6 | L149 | INDUCTOR,CHIP | ELCH0005019 | 68 nH,J ,1005 ,R/TP , | | |
| 6 | L401 | RES,CHIP,MAKER | ERHZ0000401 | 0 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | L701 | INDUCTOR,SMD,POWER | ELCP0008001 | 4.7 uH,M ,2.5*2.0*1.0 ,R/TP , | | |
| 6 | L702 | INDUCTOR,SMD,POWER | ELCP0008001 | 4.7 uH,M ,2.5*2.0*1.0 ,R/TP , | | |
| 6 | L703 | INDUCTOR,SMD,POWER | ELCP0008001 | 4.7 uH,M ,2.5*2.0*1.0 ,R/TP , | | |
| 6 | L704 | INDUCTOR,CHIP | ELCH0005010 | 1.8 nH,S ,1005 ,R/TP , | | |
| 6 | L705 | INDUCTOR,CHIP | ELCH0005010 | 1.8 nH,S ,1005 ,R/TP , | | |
| 6 | L706 | INDUCTOR,CHIP | ELCH0005010 | 1.8 nH,S ,1005 ,R/TP , | | |
| 6 | Q101 | TR,BJT,ARRAY | EQBA0000602 | TESV ,200 mW,R/TP ,EPITAXIAL PLANAR NPN/PNP TRANSISTOR | | |
| 6 | Q102 | TR,BJT,ARRAY | EQBA0000602 | TESV ,200 mW,R/TP ,EPITAXIAL PLANAR NPN/PNP TRANSISTOR | | |
| 6 | Q704 | TR,FET,P-CHANNEL | EQFP0006801 | MICRO FOOT ,1.47 W,-20 V,-5.8 A,R/TP , | | |
| 6 | R101 | RES,CHIP,MAKER | ERHZ0000401 | 0 ohm,1/16W ,J ,1005 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|----------------|-------------|--------------------------------|-------|--------|
| 6 | R102 | INDUCTOR,CHIP | ELCH0001036 | 5.6 nH,S ,1005 ,R/TP ,PBFREE | | |
| 6 | R103 | RES,CHIP,MAKER | ERHZ0000495 | 56 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R104 | RES,CHIP,MAKER | ERHZ0000212 | 12 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R106 | RES,CHIP,MAKER | ERHZ0000310 | 680 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R107 | RES,CHIP,MAKER | ERHZ0000408 | 110 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R108 | RES,CHIP,MAKER | ERHZ0000408 | 110 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R109 | RES,CHIP,MAKER | ERHZ0003801 | 5.1 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R110 | RES,CHIP,MAKER | ERHZ0003801 | 5.1 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R111 | RES,CHIP | ERHY0013101 | 2.7 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R112 | RES,CHIP,MAKER | ERHZ0000404 | 1 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R113 | RES,CHIP,MAKER | ERHZ0000404 | 1 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R114 | RES,CHIP | ERHY0013101 | 2.7 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R115 | RES,CHIP,MAKER | ERHZ0000404 | 1 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R116 | RES,CHIP,MAKER | ERHZ0000404 | 1 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R117 | RES,CHIP,MAKER | ERHZ0000243 | 2200 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R118 | RES,CHIP,MAKER | ERHZ0000206 | 10 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R119 | RES,CHIP,MAKER | ERHZ0000512 | 82 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R120 | RES,CHIP,MAKER | ERHZ0000512 | 82 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R121 | RES,CHIP,MAKER | ERHZ0000512 | 82 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R122 | RES,CHIP | ERHY0003301 | 100 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R123 | RES,CHIP,MAKER | ERHZ0000490 | 51 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R124 | RES,CHIP,MAKER | ERHZ0000408 | 110 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R125 | RES,CHIP,MAKER | ERHZ0000408 | 110 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R126 | RES,CHIP,MAKER | ERHZ0000527 | 200 ohm,1/6W ,J ,1005 ,R/TP | | |
| 6 | R127 | RES,CHIP | ERHY0003301 | 100 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R131 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R132 | RES,CHIP,MAKER | ERHZ0000490 | 51 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R133 | RES,CHIP,MAKER | ERHZ0000401 | 0 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R135 | RES,CHIP,MAKER | ERHZ0000401 | 0 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R136 | RES,CHIP,MAKER | ERHZ0000203 | 10 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R137 | RES,CHIP,MAKER | ERHZ0000529 | 1.5 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R138 | RES,CHIP,MAKER | ERHZ0000351 | 11800 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R139 | RES,CHIP | ERHY0005902 | 5.62 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R140 | RES,CHIP,MAKER | ERHZ0000326 | 330 ohm,1/16W ,F ,1005 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|----------------|-------------|--------------------------------------|-------|--------|
| 6 | R141 | RES,CHIP | ERHY0013101 | 2.7 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R142 | RES,CHIP,MAKER | ERHZ0000490 | 51 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R143 | RES,CHIP,MAKER | ERHZ0000402 | 10 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R201 | RES,CHIP | ERHY0009553 | 1 Mohm,1/20W(0.05W) ,F ,0603 ,R/TP | | |
| 6 | R202 | RES,CHIP,MAKER | ERHZ0000287 | 47 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R203 | RES,CHIP,MAKER | ERHZ0000222 | 150 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R204 | RES,CHIP | ERHY0009527 | 47 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R205 | RES,CHIP | ERHY0009516 | 2.2 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R206 | RES,CHIP | ERHY0009527 | 47 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R207 | RES,CHIP | ERHY0009527 | 47 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R208 | RES,CHIP | ERHY0009505 | 10 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R209 | RES,CHIP | ERHY0009539 | 20 ohm,1/20W(0.05W) ,F ,0603 ,R/TP | | |
| 6 | R211 | RES,CHIP,MAKER | ERHZ0000437 | 2 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R212 | RES,CHIP | ERHY0009516 | 2.2 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R213 | RES,CHIP | ERHY0009516 | 2.2 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R306 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R307 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R308 | RES,CHIP | ERHY0009516 | 2.2 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R312 | RES,CHIP,MAKER | ERHZ0000493 | 51 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R314 | RES,CHIP,MAKER | ERHZ0000493 | 51 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R401 | RES,CHIP,MAKER | ERHZ0000422 | 15 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R402 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R404 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R407 | RES,CHIP,MAKER | ERHZ0000500 | 62 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R408 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R414 | RES,CHIP,MAKER | ERHZ0004301 | 0.1 ohm,1/4W ,F ,ETC ,R/TP | | |
| 6 | R505 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R506 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R507 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R508 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R509 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R601 | RES,CHIP | ERHY0003301 | 100 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R703 | RES,CHIP,MAKER | ERHZ0004201 | 121000 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R704 | RES,CHIP,MAKER | ERHZ0000439 | 200 Kohm,1/16W ,J ,1005 ,R/TP | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|------------------|-------------|---|-------|--------|
| 6 | R707 | RES,CHIP,MAKER | ERHZ0000490 | 51 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R708 | RES,CHIP,MAKER | ERHZ0000493 | 51 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R710 | RES,CHIP,MAKER | ERHZ0000493 | 51 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R711 | RES,CHIP,MAKER | ERHZ0000486 | 47 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R712 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R713 | RES,CHIP | ERHY0009504 | 1 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R717 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R718 | RES,CHIP,MAKER | ERHZ0000423 | 150 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R719 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R801 | RES,CHIP | ERHY0009516 | 2.2 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R802 | RES,CHIP | ERHY0009553 | 1 Mohm,1/20W(0.05W) ,F ,0603 ,R/TP | | |
| 6 | R803 | RES,CHIP | ERHY0009559 | 330 Kohm,1/20W(0.05W) ,F ,0603 ,R/TP | | |
| 6 | R804 | RES,CHIP | ERHY0003301 | 100 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R806 | RES,CHIP,MAKER | ERHZ0000288 | 470 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R807 | RES,CHIP,MAKER | ERHZ0000404 | 1 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R808 | RES,CHIP,MAKER | ERHZ0000537 | 680000 ohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R810 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R813 | RES,CHIP | ERHY0009528 | 470 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R821 | RES,CHIP,MAKER | ERHZ0000484 | 470 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R822 | RES,CHIP,MAKER | ERHZ0000484 | 470 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R823 | RES,CHIP,MAKER | ERHZ0000484 | 470 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R825 | RES,CHIP | ERHY0003301 | 100 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R826 | RES,CHIP | ERHY0009506 | 100 Kohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R829 | RES,CHIP,MAKER | ERHZ0000406 | 100 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R830 | RES,CHIP,MAKER | ERHZ0000405 | 10 Kohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R831 | RES,CHIP,MAKER | ERHZ0000318 | 80.6 Kohm,1/16W ,F ,1005 ,R/TP | | |
| 6 | R834 | RES,CHIP | ERHY0009524 | 47 ohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R835 | RES,CHIP | ERHY0009524 | 47 ohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | R836 | RES,CHIP,MAKER | ERHZ0000419 | 15 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R837 | RES,CHIP,MAKER | ERHZ0000419 | 15 ohm,1/16W ,J ,1005 ,R/TP | | |
| 6 | R838 | RES,CHIP | ERHY0009507 | 1 Mohm,1/20W(0.05W) ,J ,0603 ,R/TP | | |
| 6 | S801 | CONN,SOCKET | ENSY0014101 | 8 PIN,ETC , ,1.1 mm,T-Flash Memory Socket | | |
| 6 | SW101 | CONN,RF SWITCH | ENWY0002304 | STRAIGHT ,SMD ,0.8 dB,MUSE MODEL | | |
| 6 | U101 | FILTER,SEPERATOR | SFAY0009201 | , , dB, dB, dB, dB,ETC , | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|------------------------|-------------|--|-------|--------|
| 6 | U102 | IC | EUSY0300501 | QFN ,56 PIN,R/TP ,GSM, WCDMA Single RF Transceiver, 8X8X0.9 | | |
| 6 | U103 | PAM | SMPY0014801 | 34.5 dBm,55 %, A, dBc, dB,6x8x1.2 ,SMD ,Edge PAM for QCT , , , , , , , , ,SMD ,R/TP ,16 | | |
| 6 | U104 | COUPLER,RF DIRECTIONAL | SCDY0003402 | -20 dB,-0.25 dB,-35 dB,1.0*0.58*0.35 ,SMD ,1850M ~ 1910M, 4pin, Pb Free | | |
| 6 | U106 | IC | EUSY0278501 | SON5-P-0.50 ,5 PIN,R/TP ,INVERTER GATE, Pb Free | | |
| 6 | U107 | COUPLER,RF DIRECTIONAL | SCDY0003401 | -22 dB,-0.2 dB,-37 dB,1.0*0.58*0.35 ,SMD ,824M ~ 849M, 4pin, Pb Free | | |
| 6 | U108 | PAM | SMPY0010601 | 28 dBm,41 %, A,-51 dBc, dB,4X4 ,SMD ,QFN ,24 PIN,R/TP ,DUAL-BAND PAM(CELL/USPCS | | |
| 6 | U109 | MODULE,ETC | SMZY0010701 | Bluetooth RF Module, 4.5*3.2*1.2 | | |
| 6 | U110 | IC | EUSY0300401 | QFN ,48 PIN,R/TP ,WCDMA Dual Receiver IC for USA, 7X7X0.9 | | |
| 6 | U201 | IC | EUSY0334501 | CSP ,409 PIN,R/TP ,HSDPA3.6Mbps Baseband | | |
| 6 | U301 | IC | EUSY0300101 | WQFN ,10 PIN,R/TP ,Small package Dual SPDT analog Switch, PB-Free | | |
| 6 | U302 | IC | EUSY0278601 | QFN ,9 PIN,R/TP ,9 PIN,R/TP ,2.5W Mono D-Class Audio AMP | | |
| 6 | U303 | MICROPHONE | SUMY0010602 | UNIT , -42 dB,6.15*3.76*1.25 ,Silicon mic , , -42 ,300 ,OMNI ,[empty] ,6.15*3.76*1.25 ,SMD | | |
| 6 | U401 | IC | EUSY0236901 | DFN ,12 PIN,R/TP ,1x1.5x2x Charge pump(Sink type) | | |
| 6 | U402 | IC | EUSY0223002 | HVSOF5 ,5 PIN,R/TP ,150mA CMOS LDO WITH OUTPUT CONTROL / 2.8V | | |
| 6 | U403 | DIODE,TVS | EDTY0007801 | SC-70 ,5 V,150 W,R/TP ,LOW CAPACITANCE TVS ARRAY | | |
| 6 | U404 | IC | EUSY0254901 | MLF ,10 PIN,R/TP ,Dual(2.7V/150mA,1.8V/300mA) LDO | | |
| 6 | U405 | IC | EUSY0313401 | QFN ,4 PIN,R/TP ,1.8X1.2X0.5 size wide input voltage Hall Switch | | |
| 6 | U701 | IC | EUSY0306302 | BCCS ,84 PIN,R/TP ,7x7, MSMC(1.2V), pbfree | | |
| 6 | U702 | IC | EUSY0307301 | DFN ,10 PIN,R/TP ,DC/DC+Inductor | | |
| 6 | U801 | IC | EUSY0250501 | SC70 ,5 PIN,R/TP ,Comparator, pin compatible to EUSY0077701 | | |
| 6 | U802 | FILTER,EMI/POWER | SFEY0006501 | SMD ,3 TERMINAL EMI FILTER | | |
| 6 | U804 | IC | EUSY0333701 | TLLGA ,8 PIN,R/TP ,OVP | | |
| 6 | U805 | IC | EUSY0332901 | WDFN ,8 PIN,R/TP , -12V, 6.3A, Single P-MOSFET & DUAL Transistor | | |
| 6 | U806 | IC | EUSY0336901 | FBGA ,225 PIN,ETC ,1G(LB/128Mx16/2.7V) NAND+512(16Mx32) SDRAM , ,IC,MCP | | |
| 6 | VA301 | DIODE,TVS | EDTY0009401 | VMN2 ,5 V,10 W,R/TP ,1.0*0.6*0.4 , , ,7.82V , , ,100mW ,[empty] ,[empty] ,2P ,1 | | |
| 6 | VA502 | VARISTOR | SEVY0005402 | 5.6 V , ,SMD ,1005 Siez , 50pF | | |
| 6 | VA503 | VARISTOR | SEVY0005402 | 5.6 V , ,SMD ,1005 Siez , 50pF | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-------------|-------------|--|-------|--------|
| 6 | VA504 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA505 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA506 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA507 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA508 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA509 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA510 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA511 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA601 | DIODE,TVS | EDTY0007501 | SOD-523 ,5 V,240 W,R/TP ,Vc 12.5V , 160pF , 1.6*0.8*.06 | | |
| 6 | VA602 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA603 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA604 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA605 | VARISTOR | SEVY0005401 | 18 V , SMD ,15pF,1005 | | |
| 6 | VA606 | VARISTOR | SEVY0005401 | 18 V , SMD ,15pF,1005 | | |
| 6 | VA607 | VARISTOR | SEVY0005401 | 18 V , SMD ,15pF,1005 | | |
| 6 | VA608 | VARISTOR | SEVY0005401 | 18 V , SMD ,15pF,1005 | | |
| 6 | VA609 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA610 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA611 | VARISTOR | SEVY0000702 | 14 V,10% ,SMD , | | |
| 6 | VA801 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA802 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA803 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA804 | VARISTOR | SEVY0003602 | 5.6 V , SMD ,1005, 60pF | | |
| 6 | VA805 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA806 | DIODE,TVS | EDTY0009401 | VMN2 ,5 V,10 W,R/TP ,1.0*0.6*0.4 ; , ,7.82V , ,100mW ,[empty] ,[empty] ,2P ,1 | | |
| 6 | VA807 | DIODE,TVS | EDTY0009401 | VMN2 ,5 V,10 W,R/TP ,1.0*0.6*0.4 ; , ,7.82V , ,100mW ,[empty] ,[empty] ,2P ,1 | | |
| 6 | VA808 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA809 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA810 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA811 | VARISTOR | SEVY0005402 | 5.6 V , SMD ,1005 Siez , 50pF | | |
| 6 | VA820 | DIODE,TVS | EDTY0009401 | VMN2 ,5 V,10 W,R/TP ,1.0*0.6*0.4 ; , ,7.82V , ,100mW ,[empty] ,[empty] ,2P ,1 | | |
| 6 | X201 | RESONATOR | EXRY0002401 | 48 MHz,.5 % ,14 pF,SMD ,2.0*1.2*0.65 ,Outgoing Tolerance 0.2% , 0.05% at -40°C ~ +85C, Built-In Cap | | |

11. EXPLODED VIEW & REPLACEMENT PART LIST

11.3 Accessory

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

| Level | Location No. | Description | Part Number | Specification | Color | Remark |
|-------|--------------|-------------------------|-------------|--|-------|--------|
| 3 | SBPP00 | BATTERY PACK,LI-POLYMER | SBPP0022901 | 3.7 V,950 mAh,1 CELL,PRISMATIC ,CU570 BATT, Pb-Free ; ,3.7 ,950 ,0.2C ,PRISMATIC ,59x37x38 , ,BLACK ,Hardpack ,America Label | Black | 95 |
| 3 | SSAD00 | ADAPTOR,AC-DC | SSAD0024401 | 100-240V ,5060 Hz,5.1 V, ,7 A,UL/CSA ,AC-DC ADAPTOR ; ,85Vac ~ 264Vac ,5.1V +0.15, -0.2V ,700mA ,5060 , ,WALL 2P ,I/O CONNECTOR , | | |
| | | ADAPTOR,AC-DC | SSAD0024402 | 100-240V ,5060 Hz,5.1 V,0.7 A,UL/CSA ,AD-DC ADAPTOR ; ,85Vac~264Vac ,5.1 +0.15, -0.2V ,700mA ,5060 , ,WALL 2P ,I/O CONNECTOR , | | |
| | | ADAPTOR,AC-DC | SSAD0024403 | 100-240V ,5060 Hz,5.1 V, ,7 A,UL/CSA ,AC-DC ADAPTOR ; ,85Vac~264Vac ,5.1V (+0.15V, -0.2V) ,700mA ,5060 , ,WALL 2P ,I/O CONNECTOR , | | |
| | | ADAPTOR,AC-DC | SSAD0024404 | 100-240V ,5060 Hz,5.1 V, ,7 A,UL/CSA ,AC-DC ADAPTOR ; ,85Vac~264Vac ,5.1 (+0.15V, -0.2V) ,700mA ,5060 , ,WALL 2P ,I/O CONNECTOR , | | |

Note
